Funding Proposal Template

Application Template for Fully Developed Proposal and Project Concept Proposal[1]

PROGRAMME ON INNOVATION:
LARGE GRANTS PROJECTS

REQUEST FOR PROJECT FUNDING FROM THE ADAPTATION FUND

The annexed form should be completed and transmitted to the Adaptation Fund Board Secretariat by email.

Please type in the responses using the template provided. The instructions attached to the form provide guidance to filling out the template.

Please note that a project must be fully prepared when the request is submitted.

Complete documentation should be sent to:

The Adaptation Fund Board Secretariat
1818 H Street NW
MSN N7-700
Washington, D.C., 20433
U.S.A
Fax: +1 (202) 522-3240/5
Email: afbsec@adaptation-fund.org

[1] Single Country and Regional Concept proposals should complete Part I and Part II of the Project Proposal Template.

SINGLE COUNTRY INNOVATION PROJECT

CONCEPT NOTE

PART I: PROJECT/PROGRAMME INFORMATION

Title of Project/Programme:	Strengthening Urban Resilience in the Río Negro Basin through Nature-Based Solutions (NbS) for Climate Adaptation.
Country/ Countries:	URUGUAY
Thematic Focal Area[2]:	Innovative climate finance
Type of Implementing Entity:	National Implementing Entity
Implementing Entity:	Corporación Nacional para el Desarrollo (CND)
Executing Entities:	TBD
Amount of Financing Requested:	5,000,000 (in U.S. Dollars Equivalent)
Project Formulation Grant Request:	Yes
Amount of Requested financing for PFG:	150,000 (in U.S Dollars Equivalent)
Letter of Endorsement (LOE) signed:	Yes
Stage of Submission:	This is the first submission ever of the concept proposal

[2] Thematic areas are: Agriculture, Coastal Zone Management, Disaster risk reduction, Food security, Forests, Human health, Innovative climate finance, Marine and Fisheries, Nature-based solutions and ecosystem based adaptation, Protection and enhancement of cultural heritage, Social innovation, Rural development, Urban adaptation, Water management, Wildfire Management.

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Project / Programme Background and Context:

Uruguay Country Context:

1. With a total area of 176,220 km2, Uruguay is the second smallest country in South America. Its economy is based on agro-industrial production, services, and a dynamic tourism sector. With a low population density stressed by its low birth rates, 93.4 % of Uruguay's total population (3,286,314 inhabitants) lives in cities and a steady trend continues in that direction. The capital, Montevideo, is the largest city with 1,284,699 inhabitants. Population exceeds 50,000 inhabitants in 7 more cities, 43 cities are between 10,000 and 49,999 inhabitants, and 28 cities are between 5,000 and 9,999 inhabitants. These cities face multiple climate hazards due to a greater frequency and intensity of severe climate events, such as intense precipitation and floods alternating with drought periods, heat/cold waves, storms, strong winds and rising sea levels. Population, activities and infrastructure are all predominantly concentrated in areas that are exposed to climate risks. These factors make the country's cities highly vulnerable to climate change and its variability.[3] [2] [3] [4] [5] [6]

2. The Río Negro basin, situated in central Uruguay, spans a significant portion of the national territory and plays a crucial role in the country's hydrology and land use, and is the country's primary freshwater system. It is critical to Uruguay's economy supporting agricultural, industrial, and hydroelectric activities. The basin supports a population of 368.382 (INE, 2011) people[4] and encompasses cities with over 10,000 residents across the Departments of Durazno, Flores, Rio Negro, Rivera, Soriano, and Tacuarembó (Table 1) and numerous villages with under 5,000 people. A portion from the Departments of Paysandú and Cerro Largo are also included in the basin area, but no city with a population over 10.000 is contained.

Department	City	Capital	Municipality	Population (INE 2023)
Durazno	Durazno	Yes		40,279
Flores	Trinidad	Yes		22,893
Rio Negro	Young		Yes	17,814
Rivera	Rivera	Yes		84,775
Soriano	Mercedes	Yes		43,528
Tacuarembó	Tacuarembó	Yes		60,581
	Paso de los Toros		Yes	14,210
TOTAL				**284,080**

Table 1 Rio Negro Basin Cities > 10,000 inhabitants (INE 2023)

3. Despite its economic and ecological importance, the basin is under significant stress from climate variability and human pressures related to the combined and increasing effects of rising temperatures and flooding disrupts infrastructure and productivity and threatens agriculture and water availability. The basin consists of a vast network of tributaries, with notable sub-basins such as the Río Yí and Río Tacuarembó, which contribute to its hydrological complexity. The region has low topographical variation, with an average altitude ranging from approximately 150 to 380 meters above sea level. It is mainly composed of agricultural lands, interspersed with patches of forest and growing urban settlements.

[3] World Bank. Available at: URL: https:// datos.bancomundial. org/indicador/ag.srf.totl. k2?locations=UY.
[4] Census 2023 from National Environmental Observatory (OAN)-Population by watersheld URL:https://www.ambiente.gub.uy/visualizador/index.php?vis=sig#

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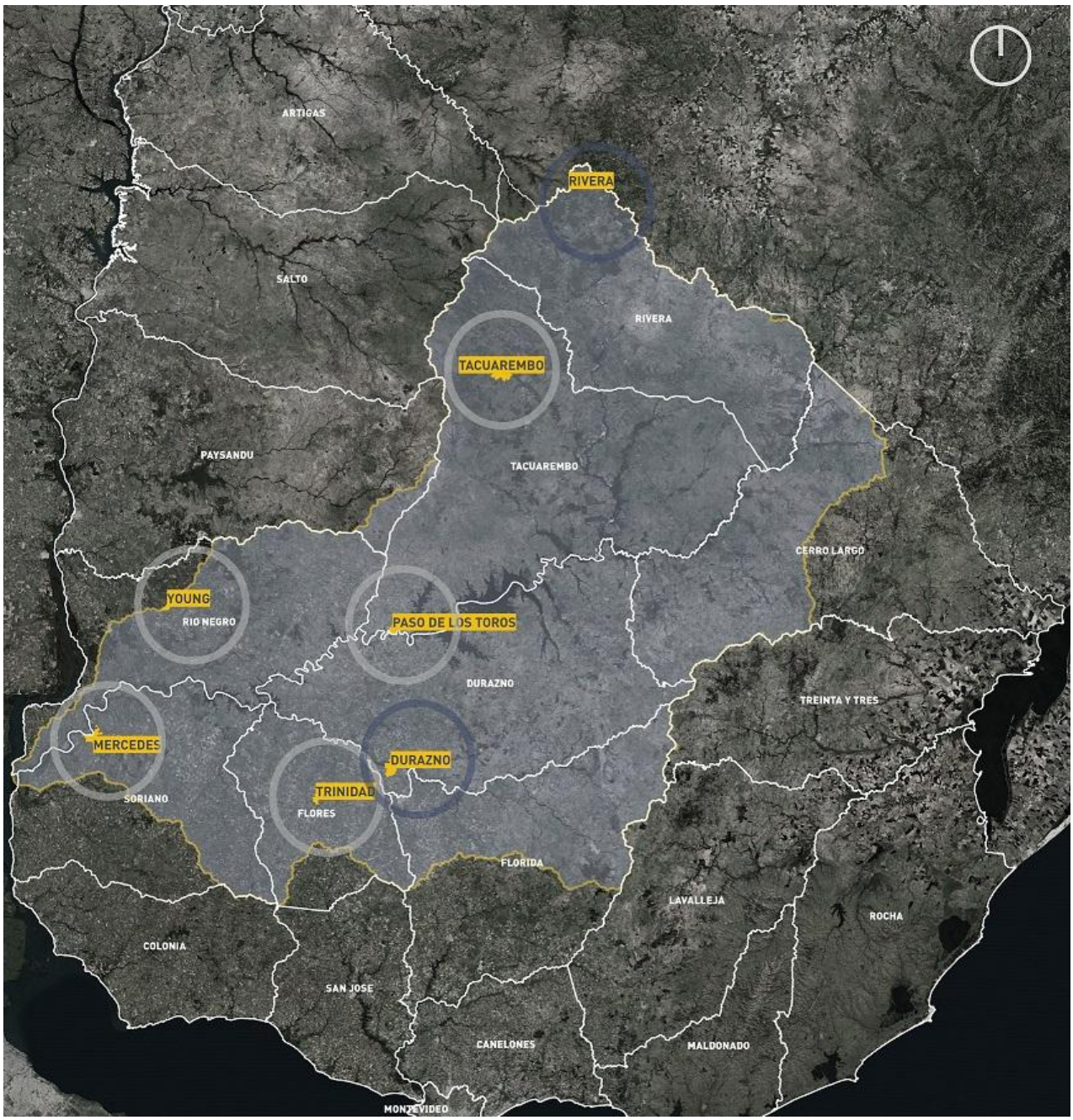

Figure 1 Cities with over 10.000 residents in the Rio Negro Bassin.

Uruguay National Climate Policies and Strategies:

4. The National Adaptation Plan for Cities and Infrastructure (NAP-cities) indicates temperature rises between 0.5°C and 1.6°C over a short-term horizon (2020 2044) and rises between 1.5°C and 5.5°C for a long run (2075-2099) as compared to the 1981-2010 period with no significant differences in global socio-economic change scenarios (SSP). This indicates that heat waves in the region will rise in amount and duration by the end of the 21st century.[5] [9] [10] 12 13 A rise in temperature will increase

[5] Sensu NAP-Cities, Climate projections are based on models that numerically solve (using supercomputers) mathematical equations which characterise how mass and energy move in the atmosphere, oceans, continents and ice, and its exchange between them

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the water vapor content in the atmosphere leading to more storms and higher expected rainfall, in the absence of other changes. The increase in the accumulated total is accompanied by an increase in the frequency of extreme rainfall events and a decrease in the number of days with light rain by the end of the 21st century.[11] This is significant for the cities in the Rio Negro Basin that are located near watercourses where historical flood events have had a significant impact on infrastructure and land use.

5. Among the climate-related risks reported in the SDG Voluntary National Report, for SDG 13-Climate Action, indicator 13.1.1 recorded a threshold of 192 people displaced by disasters in Uruguay between 2015 and 2024, ranging from 2,021 to 43,511 in 2016. Uruguay has taken proactive climate action through National Adaptation Plans (NAPs) for agriculture, coastal areas, cities and infrastructure, energy, and health. These focus on building resilience, integrating gender and social inclusion, and promoting ecosystem-based adaptation (EbA). National strategies, such as the National Climate Change Policy, prioritize adaptation measures that integrate Nature-based Solutions (NbS), making this project a strategic extension of these efforts. It will contribute to the following Nationally Determined Contributions (NDC)

   - **The First NDC (2017)** includes measures stating that by 2025, *"at least seven departments will have regional, departmental, or municipal plans for local adaptation to climate change and variability"* and *"adaptation measures will be promoted in at least 30% of cities with more than 5,000 inhabitants to address vulnerabilities and improve their adaptive capacities."*
   - **The Second NDC (2022)** includes measures stating that by 2030, *"all departments will have incorporated, in at least one urban locality, ecosystem-based adaptation as a strategy to improve habitat conditions in urban environments and enhance their climate resilience."*
   - **The Third NDC (2024)** includes measures related to adaptation for cities and infrastructure. It is proposed to incorporate adaptation to climate change in land use planning and urban management instruments, incorporating nature-based solutions: "*By 2035, all cities with more than 5,000 inhabitants have incorporated nature-based solutions as a strategy to improve habitat conditions and optimize their performance towards the effects of climate change*". It is also promoted the generation of financing instruments for the implementation of adaptation actions that improve the resilience of cities towards climate change effects: "*By 2035, a guide will have been promoted and implemented with the different national instruments applicable to the financing of climate change adaptation actions to improve the resilience of urban buildings and infrastructure towards future climate conditions.*"

6. In addition, the project is aligned with the National Urban Adaptation Plan (NAP Cities & Infrastructures), whose strategic lines prioritize nature-based solutions, resilient urban drainage, risk-informed urban planning instruments and strengthened local capacities for climate-resilient urban management. The interventions proposed under this project contribute directly to the implementation of these priorities in intermediate cities.

7. The project is particularly aligned with several specific measures of the NAP Cities & Infrastructures, including:

   - M12: Strengthening the role of vegetation and public spaces in improving urban climate performance.
   - M14: Developing and expanding green and blue infrastructure in cities.
   - M16: Promoting the creation and management of green areas in high flood-risk urban zones.
   - M27: Supporting technical and academic studies to improve climate risk assessments in cities.
   - M28: Expanding the development and dissemination of knowledge on ecosystems and green–blue infrastructure.

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8. Other relevant national planning instruments related are:

- Integrated Water Resources Management Plan for the Rio Negro Basin *(Plan de Gestión Integrada de los Recursos Hídricos del río Negro*);
- National Law for Land Use Planning and Sustainable Development (Law 18.308);
- National Guidelines for Land Use Planning and Sustainable Development (Law 19.525);
- National Program for Land Use Planning and Sustainable Development of the Rio Negro Basin (under development);
- National Program for Land Use Planning and Sustainable Development of the Central Region - Decree 207-23;
- National Policy for Integrated Risk Management of Emergencies and Disasters - Decree 066/020;
- National Plan for Urban Stormwater Management for Uruguay;
- National Environmental Plan for Sustainable Development - Decree 222/019;
- National Water Plan - Decree 205/017.

Project Background:

9. The National Adaptation Plan for Cities (hereinafter NAP-cities), which is derived from the National Policy on Climate Change, seeks to *reduce the vulnerability of communities to the effects of climate change and variability by building adaptive capacity and resilience in cities, infrastructures and urban environments, integrating climate change adaptation into relevant new and existing policies, programmes and activities, and into development planning processes and strategies in order to improve the population's quality of life.* It does so with 5 Specific Objectives that aims amongst others the incorporation of adaptation in urban and land planning, construction, ecosystem services and the strengthen capacities for communities, human settlements and efficiency in the use of resources. The implementation of Strategy 2050 is carried out through five strategic lines which group 41 medium- and long-term measures.

- SL1. Land planning and city planning.
- SL2. Changes of urban habitat.
- SL3. Integral risk management for emergencies and disasters.
- SL4. Strengthening capacities, awareness and communication.
- SL5. Transition towards sustainable production and consumption methods.

10. Building on the strategic orientation provided by the NAP-Cities, Uruguay has identified priority needs related to nature-based solutions, the management of green and blue infrastructure, and the improvement of urban climate-risk assessment. These priorities highlight areas where further development and investment are required, and they provide the foundation for the innovative solutions that the proposed project aims to design, validate and implement.

11. From a local approach and based on the experience of NAP-cities, the Nature4Cities Project[6] (N4C) is particularly relevant as it supports national and local governments to accelerate climate action within cities by protecting and/or restoring ecosystem services through Nature-based Solutions (NbS).

12. Within the Rio Negro region, the Nature4Cities project has undertaken important baseline activities to reduce the vulnerability in two cities, Durazno and Rivera, which were selected based on climate vulnerability conditions as outlined in studies conducted under the NAP-cities. The National Directorate of Climate Change (DINACC) from the Ministry of Environment (MA) was the National Designated Authority (NDA), and a Cities Adaptation Group from the National Climate Change Response System (SNRCC) served as the national coordination platform. A participatory process was carried forward by a contracted project management unit to enable the co-creation of knowledge, thereby facilitating the involvement of all stakeholders in diagnosing climate risks, exploring solutions,

[6] The Nature4Cities (N4C) project website: https://cityadapt.com/en/nature4cities/

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and selecting NbS as the most appropriate approach to integrating vulnerability and risks into urban planning, supporting decision-making, and thereby ensuring the scaling of NbS and their multiple co-benefits linked to the sustainable use of urban and peri-urban ecosystems.

13. The project produced a baseline Climate Vulnerability and Risk Analyses for the cities of Durazno and Rivera (IH Cantabria 2024). The Nature4Cities Project further produced Nature Based Urban adaptation Plans for Rivera and Durazno based on a suite of foundational documents, among the following[7]: (i) the already mention Vulnerability and Risk Assessment; (ii) an NbS Catalogue for each city; (iii) Policy and Integration Analysis; (iv) Guides to support investment in climate action based on land value capture; (v) Private Sector Engagement Strategies; (vi); Impact Causal Chain−Temperature, Flooding, Water Resources−; (viii) NbS Cost Benefit and Cost Efficiency applied methodologies. The N4C findings include quantitative estimates of economic damage, exposure maps pinpointing high-risk zones and vulnerable groups, and strategic recommendations to enhance infrastructure resilience, governance, and climate-smart urban planning. The results confirm that both cities face substantial climate risks, emphasizing the urgent need for proactive adaptation measures at local and regional levels.

14. Both cities exhibit high levels of exposure in densely populated urban areas, and the impacts of climate change will intensify the risks associated with flooding. This highlights the importance of prioritizing mitigation and adaptation measures focused on urban planning, strengthening drainage infrastructure, and protecting the most vulnerable groups.

15. The body of work developed recognizes several key barriers to implementing and scaling NbS and/or other technologies as adaptive measures. Among the fundings, the absence of financial mechanisms and/or incentives to attract private investment for adaptation is a key barrier to implementing and scaling Nature-based Solutions (NbS) in the Rio Negro region. While some tax benefits and environmental financing exist, they are insufficient and not tailored to NbS, whose results and benefits over the costs are untraditional and unknown, limiting private sector participation as a driver of change (Bentancor et al., 2019). Moreover, the current financial system does not adequately integrate climate risks into investment decisions, making it challenging to channel resources into NbS projects. Municipal governments also face limited access to international climate finance, as funding approval often requires national government intervention, restricting local-level innovation (*Uruguay _ Análisis de flujos financieros Durazno, 2023; Uruguay _ Análisis de flujos financieros Rivera, 2023*).

Subnational Financing:

16. Departmental governments in Uruguay play a key role in territorial and urban planning, holding autonomy in decision-making processes related to land use, development and infrastructure within their jurisdictions. To support this decentralized governance model, departmental governments receive funding from a balanced mix of locally collected revenues and national transfer funds. These transfers are critical for ensuring equitable development across regions, particularly outside the capital city of Montevideo. Among the primary mechanisms for financing subnational development are the *Fondo de Desarrollo del Interior* (FDI) and the *Programa de Desarrollo y Gestión Subnacional* (PDGS). These financial instruments are designed to promote regional development, decentralize public services, and support local projects through a structured allocation of national and departmental resources. The following section provides a detailed overview of these two key funding mechanisms.

17. The FDI is a budgetary fund established by Article 298 of the Constitution of Uruguay to promote regional development and decentralize activities outside Montevideo. It is funded by a portion of national taxes collected outside the capital. According to Article 663 of Law No. 19.924 (2020-2024),

[7] Documents can be consulted at: https://cityadapt.com/country/uruguay/

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60% of the fund supports decentralization policies defined by national agencies, while 40% is allocated to departmental governments for projects approved by the *Comisión Sectorial de Descentralización* (CSD), coordinated by the *Oficina de Planeamiento y Presupuesto* (OPP). Projects receive 85% funding from the FDI and 15% from departmental resources. The law states that at least 15% of the FDI budget goes to municipal projects and 3% to productive development initiatives. Resource allocation among departments is based on criteria like land area, population, GDP per capita, and housing deficiencies. The OPP oversees project execution and progress certification, while the CSD—composed of government ministries and delegates—approves projects. Eligibility criteria for projects focus on: Urban infrastructure (roads, public spaces, cultural facilities), Productive development (minimum 3% of annual budget), Municipalized territories (minimum 15% of annual budget). Nature-based Solutions (NbS) are not explicitly included as a category in the operational manual or legal framework. The guidelines prioritize physical infrastructure and institutional strengthening, leaving NbS outside the standard eligibility scope.

18. The PDGS, managed by the OPP and funded by the Inter-American Development Bank (IDB), is part of a $300 million, 25-year Conditional Credit Line for Investment Projects (CCLIP) financing line. The second operation under this program, Programa de Desarrollo y Fortalecimiento de la Gestión Fiscal y de Servicios Subnacionales II (URL-1164), aims to improve fiscal management and public investment for departmental governments. Its objectives include strengthening financial management, improving public service efficiency through digitalization, and facilitating access to sustainable and inclusive infrastructure. The Fondo Complementario (FC), a competitive fund within the investment component, supports projects with significant territorial and urban impact, prioritizing initiatives that address climate change, gender policies, and the use of information and communication technologies (ICT) for territorial management. PDGS, focuses on: Institutional strengthening (fiscal management, investment planning), and Urban infrastructure investments for connectivity and accessibility. The program's investment component defines sectors such as roads, drainage, and public facilities, but does not mention NbS or ecosystem-based adaptation as eligible interventions. While PDGS includes climate adaptation considerations (e.g., risk analysis), NbS is not listed as a financing priority, which limits its inclusion in calls.To the range of actors involved in this process, and including the public, the knowledge of NbS, their potential to mitigate municipal problems related to temperature and inundations, benefits, and returns is not well known and untested. This barrier has made it difficult to integrate NbS into established public sector financing streams and, as presented in the Private Sector Engagement Strategy[14] for Durazno and Rivera, to introduce the potential for investment through private sector avenue.

Other barriers for implementing NbS:

19. Beyond financial constraints, there are regulatory and technical barriers that hinder NbS adoption. Weak policy integration and the absence of clear legal mandates for climate adaptation in urban planning result in fragmented implementation. Land-use restrictions often prioritize conventional infrastructure, limiting space for NbS interventions. Additionally, limited technical knowledge among local planners and developers, coupled with a lack of standardized monitoring frameworks, makes it difficult to assess the effectiveness and scalability of NbS solutions (*Uruguay- Plan de Involucramiento del sector privado ciudad Rivera*, 2023).

20. Regarding the integration of Nature-based Solutions (NbS) approaches with other sectoral planning instruments, the main barrier lies in the lack of systemic and coordinated perspectives in the design of infrastructural systems. This applies to urban drainage and water systems, which should consider the entire urban water cycle (sanitation, potable water supply, watercourses, floods, and aquifers), as well as urban tree planting and green space approaches, which have traditionally focused on criteria related to the selection or planting of specimens rather than on a strategic implementation as an integrated system addressing urban challenges and articulated with other systems and subsystems.

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21. Another major barrier is related to the regulatory framework, where, although no prohibitive conditions have been detected, there are also no explicit references to this type of solution nor enabling conditions for its implementation. There is a significant, integrated, and scalable framework of national and local policies that could be leveraged for the introduction of Nature-based Solutions approaches. In this regard, the recommendations from the Nature4Cities project emphasize that, considering territorial particularities and local institutional realities, it would be essential to incorporate specific content related to climate change at the departmental level, thus strengthening and updating the zoning scheme linked to risk analysis and its incorporation into the territorial planning system, in addition to integrating the subject into building codes.

22. Furthermore, and in a complementary manner, operating from the perspective of climate change and variability requires flexible and adaptable strategies that integrate uncertainty as a key parameter. These conditions challenge the current legal frameworks, which in Uruguay are generally slow and designed to safeguard the rule of law, thus providing clear and lasting foundations and regulations. Additionally, considering the adaptation of assets such as buildings and urban infrastructure—which are typically regarded as long-lasting assets with medium- or long-term financing—presents, at first glance, a challenge that would require innovative strategies for their effective implementation.

23. Addressing these challenges requires innovative financing mechanisms as well, capacity building, and the creation of a favourable investment environment. Innovation in this area is crucial to boost private sector participation, not only through new financial instruments but also through regulatory reforms, enhanced public-private collaboration, and incentive structures that align investment with sustainability goals.

24. Increasing public awareness and engaging vulnerable communities are also essential to overcoming social barriers and ensuring that NbS contribute to equitable climate resilience. A comprehensive, multi-sectoral approach will be necessary to position Uruguay as a leader in NbS implementation, fostering a climate-resilient future (Bentancor and Mailhos, 2020).

Problem Statement

25. The Río Negro Basin in Uruguayan territory constitutes a comprehensive geographic space where significant processes of economic, environmental, and social transformation occur, and which includes the departments of Rivera, Tacuarembó, Durazno, Flores, Florida, Río Negro, Soriano, and Paysandú. According to the 2023 Census, the basin's population is concentrated in the departmental capitals and, to a lesser extent, in intermediate and small population centers. Floods are one of the most frequent events that cause significant damage to the basin's localities. According to records from the National Emergency System (SINAE), between 2000 and 2010, 63% of the hydrometeorological events that occurred in the country were floods. According to DINAGUA-IDU, there are localities in the Río Negro basin that have drainage problems: 7 of them with serious problems (Rivera, Tacuarembó Young, San Gregorio de Polanco, Isidoro Noblía, Laureles, and Paso de los Toros). The localities in the basin with the greatest river and coastal water problems are mainly departmental capitals: Rivera, Tacuarembó, Durazno, and Mercedes. The following table shows the numbers of people, men, women, households, total dwellings, and occupied dwellings affected under the curve over a 100-year return period.

Population, housing, and households affected by TR100 (Number and Percentage)

City	People	Men	Women	Households	Dwelling
Durazno	4,273 12.3%	2,181 12.7%	2,193 12.0%	1,313 11.3%	1,449 11.2%
Rivera	1,700 2.2%	659 2.3%	641 2.0%	497 1.9%	526 1.6%
Mercedes	3,173 7.6%	1,059 7.4%	1,664 7.7%	1,099 7.9%	1,233 8.3.%
Tacuarembó	4,470 8.1%	2,122 8.0%	2,348 6.2%	1,546 6.1%	1,717 7.9%

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Paso de los Toros	395 3.0%	194 3.1%	200 2.9%	139 3.1%	165 3.2%

Table 2 Population, housing, and households under the TR100 threshold in the proposed cities. (DINAGUA-IDU)

26. As described in the context section above, the cities of Rivera and Durazno face increasing vulnerability to climate-related hazards, including flooding, extreme temperatures and secondary effects which threaten urban infrastructure, economic stability, and the well-being of their populations. Despite existing adaptation efforts, both cities lack sufficient resilience measures to mitigate these risks effectively. The absence of implementation of robust climate adaptation strategies, integrated urban planning, and governance frameworks hinders their ability to cope with and respond to these evolving challenges. Without targeted and innovative interventions, solutions to these problems will remain unknown, untested, and therefore ineffective as adaptive strategies. Without these, climate risks will continue to escalate, compromising urban sustainability, economic development, and social equity.

27. The other cities in the Rio Negro Watershed do not yet have a solid vulnerability assessment, therefore the assessments done for Rivera and Durazno should be expanded to additional cities within the Rio Negro Basin as a knowledge management strategy. This will enable the public, municipal officials and the private sector to understand, devise Nature based adaptation measures, and finance these as part of an integrated approach to planning and developing infrastructure.

28. Innovations in financing will need to be positively demonstrated to obtain public and private sector buy-in needed to scale results. A basin-wide approach would facilitate the development of integrated, long-term adaptation strategies, strengthen regional resilience and enhancing coordination across municipalities. Without broader outreach and strategic coordination, climate risks will continue to escalate, compromising urban sustainability, economic development, and social equity across the Río Negro Basin.

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[1] World Bank. Available at:URL: https:// datos.bancomundial. org/indicador/ag.srf.totl. k2?locations=UY.

[2] INE, Population Census, 2011. URL: https://www.ine.gub.uy/documents/10181/35289/analisispais.pdf

[3] URU/18/002 Project document Integración del enfoque de adaptación en ciudades, infraestructura y ordenamiento territorial en Uruguay. URL: https://www.gub. uy/ministerio ambiente/politicas y gestion/planes/plan nacional adaptacioncambio climatico ciudadesinfraestructuras napciudades.

[4] INE, Population Census 2011. URL: https://www.ine.gub. uy/c/document_library/ get_file?uuid=d83c4ee8 3e4d 4a00 a2d2698ca25&groupId=10181

[5] URU/18/002 Project document Integración del enfoque de adaptación en ciudades, infraestructura y ordenamiento territorial en Uruguay.URL: https://www.gub. uy/ministerio ambiente/politicas y gestion/planes/plan nacional adaptacioncambio climatico ciudadesinfraestructuras napciudades.

[6] Presidency of the Republic, Presidency of the Republic, Sustainable Development Goals Voluntary National Review 2021. URL: https://ods.gub.uy/images/2021/Informe_Nacional_Voluntario_Uruguay_2021.pdf.

[7] The 2023 census data have been realized. Depending on the availability of disaggregated data, these figures will be updated during the development phase of the full proposal.

[8] Sensu NAP-Cities, *Climate projections are based on models that numerically solve (using supercomputers) mathematical equations which characterise how mass and energy move in the atmosphere, oceans, continents and ice, and its exchange between them*

[9] Sensu NAP-Cities, *Shared Socio-economic Pathways (SSPs), or global socio-economic scenarios of change, describe alternative*.socio economic future scenarios in the absence of climate policy intervention(IPCC, Glosario).

[10] Sensu NAP-Cities, According to CMIP5 models, from the Coupled Model Intercomparison Project of the World Climate Research Programme. Available at: <https://www.wcrp climate.org/wgcmcmip/wgcm cmip5>.

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[11] Marcelo Barreiro, Fernando Arizmendi, Romina Trinchín (2019): Variabilidad y cambio climático en Uruguay. Department of Atmospheric Sciences, Physics Institute, Faculty of Sciences, University of the Republic. Technical staff training material for national institutions. MVOTMA-UDELAR agreement. PNUD URU/16/G34 project. URL: https://www.dinama.gub.uy/oan/documentos/Variabilidady cambio clim%C3%A1tico en Uruguay. Material de capacitaci%C3%B3n dirigido a T%C3%A9cnicos de Instituciones Nacionales1.pdf.

[12] Gustavo Robaina and Gonzalo Pastorino (2021): Informe de vulnerabilidad al cambio y variabilidad climática, URU/18/002 project Integración del enfoque de adaptación en ciudades, infraestructura y ordenamiento territorial en Uruguay. Sensu data analysis of Desinventar (SINAE).

[13] Data from 2023 will be available during the Project Formulation Phase.

[14] Cite P.S. Finance document

Project / Programme Objectives :

29. The objective of the project is to catalyse adaptation actions based on Nature-based Solutions (NbS) that reduce climate risks associated with floods and extreme temperatures in vulnerable cities of the Rio Negro Basin. This will be achieved through an innovative economic-financial mechanism integrated within existing institutional frameworks.

30. Demonstrating the effects of nature-based solutions (NbS) at an urban scale is necessary to support the adoption of NbS for adaptation to climate change and would create co-benefits in biodiversity and ecosystem conservation. This will contribute to demonstrate their value as adaptation instruments.

Project / Programme Components and Financing:

31. The project will establish fundamental conditions needed to build resilience by enabling adaptation to the effects of temperature and flooding, two primary climate change effects for medium sized cities in Uruguay's Rio Negro Basin. Enabling adaptation by implementing NbS will require generating support for an innovative process and capacity to adopt new ideas and technologies. This will require innovative actions in the following three areas:

    - An increased resilience to climate change effects through innovation, test, monitoring and evaluation in adaptive strategies (NbS Pilots);
    - Increased capacity to adopt and scale adaptation strategies, innovative NbS, and hybrid technology alternatives that integrate nature-based solutions with engineered or technological interventions, and,
    - Enabling conditions established for increased investment in cities to reduce climate change effects, through both climate change adaptation projects, including funding and the engagement of the private sector to ensure long-term financial sustainability.

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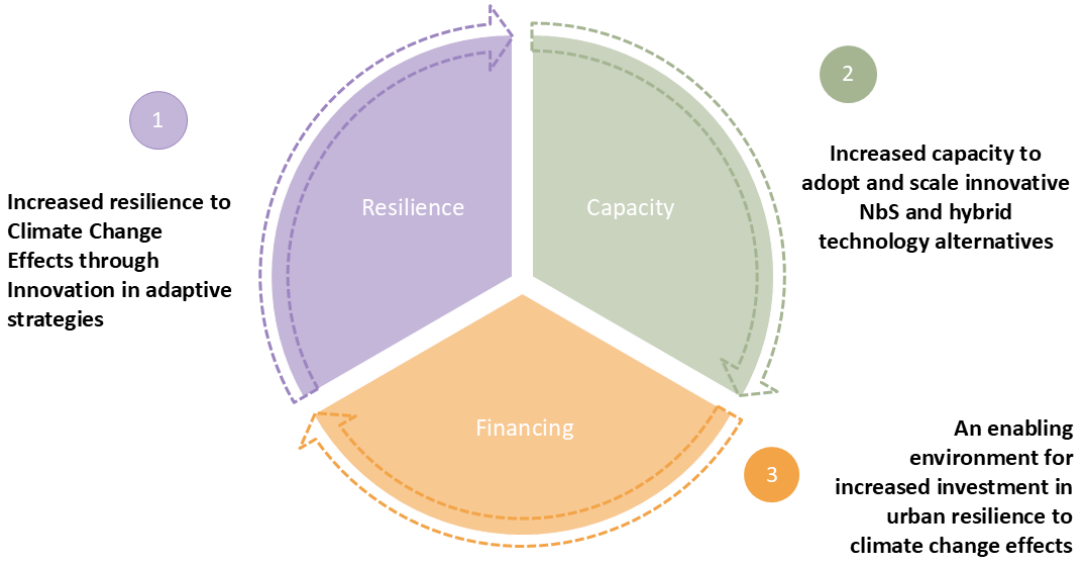

Figure 2 Diagram of components.

32. The components work synergistically, and the outcomes are planned for a non-sequential implementation. Component 1 represents the core of the on the ground implementation of NbS at the sub-national level, however, it needs the prior establishment of enabling conditions prepared by components 2 and 3. Component 3 initiates on the first year, while component 2 will remain for the entire 4 years, because on top of creating the enabling conditions it provides the necessary technical support during implementation and knowledge management expertise for diffusion of innovation. All three components have considered necessary integrations of national and subnational governments as well as the private sector. Figure 2 Illustrates the interrelations between three indicative components, outcomes and outputs further defined below.

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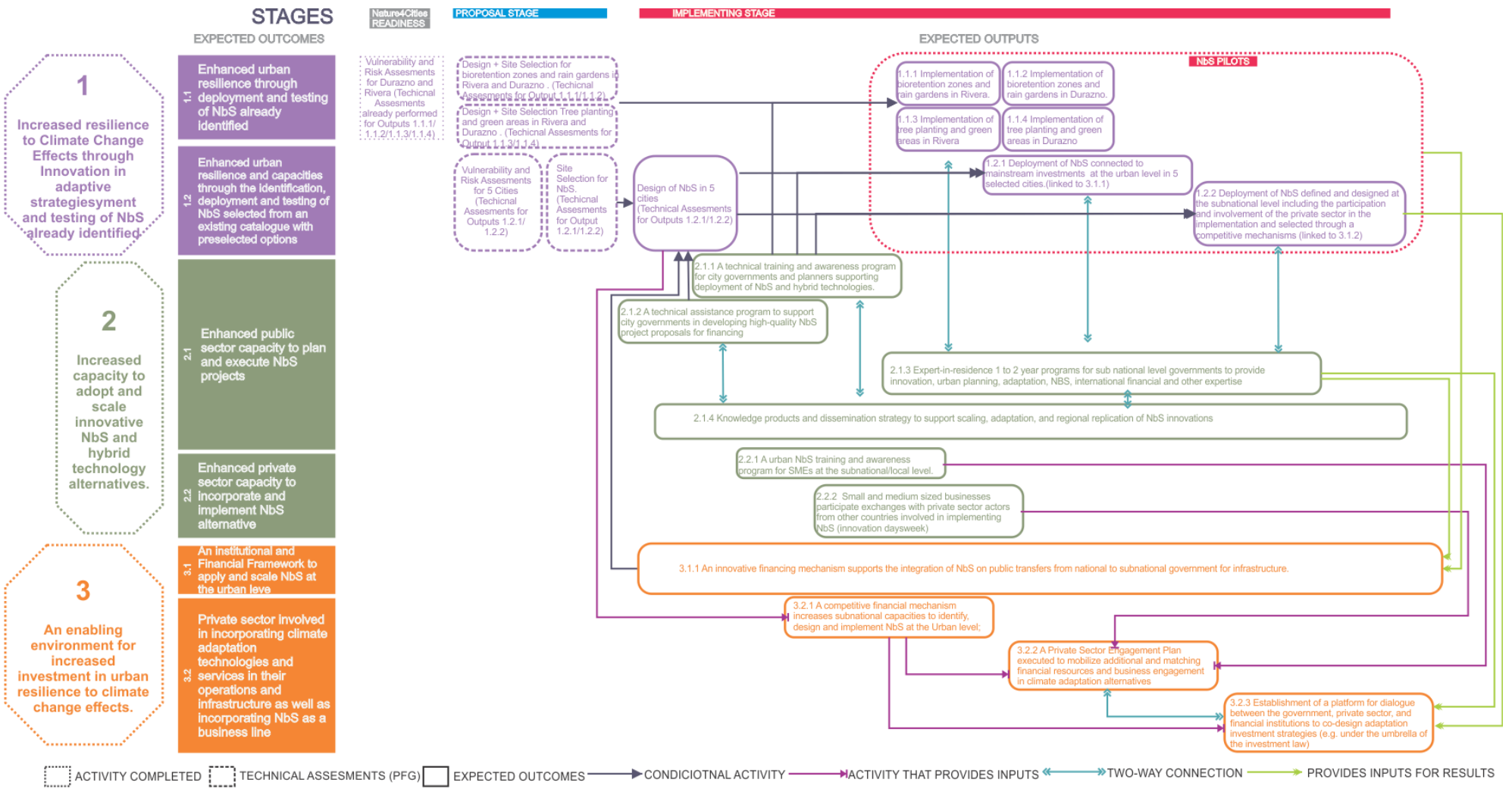

Figure 3 Interrelations between components, outcomes and outputs.

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33. In that way we propose a road map of activities that start with a base line stage that include the perform of vulnerability and risk assessments, a training stage for the public-government sector and for the private sector with specifics steps of assessment and training, and experience exchange to inform a planning stage with the cities to select sites for implementation and design, cost budgeting and cost analysis for the options selected. These 3 stages will inform a process for design the pilot implementation and to propose a competitive financing mechanism. With those stages completed we can proceed to implement the NbS Pilot through construction, monitoring and evaluation processes in parallel with another training and evaluation stage. From this stage we expected to receive inputs to inform a policy report on how to introduce NbS in the existing funds transfer mechanisms from national to subnational levels and to contribute to a national dialogue between government, the financial sector and the private sector to incentivize the NbS adoption by the private sector.

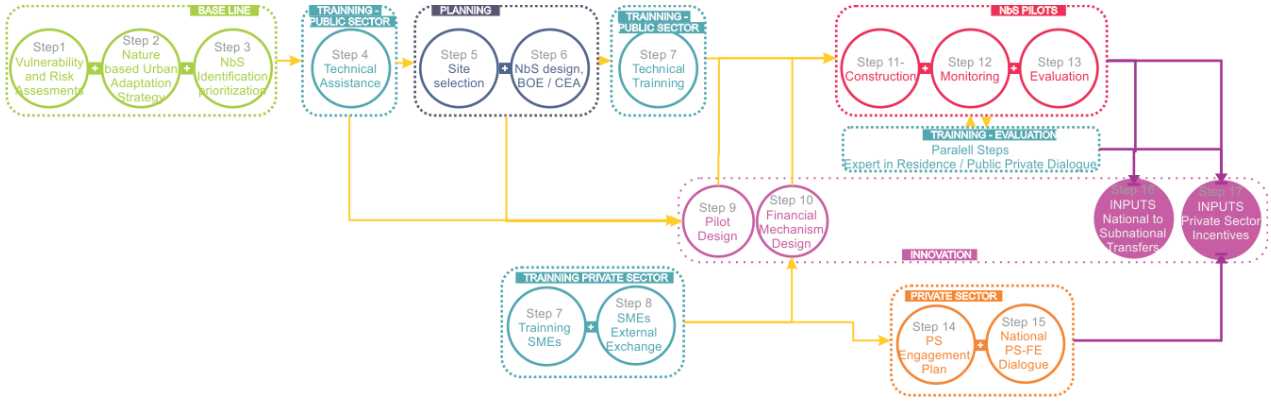

Figure 4 Roadmap for activities and phases.

34. This activities roadmap is related to a set of expected outcomes as it is delignated in the following diagram, and each phase has been structure into analytical tasks included under the fully developed proposal phase (PFG) and implementing activities incorporated in the main implementation framework. For instance, the base line phase, that includes the performing of vulnerability and risk assessments and the NbS strategy and prioritization are already complete for Durazno and Rivera, with the Nature4Cities deliverables. But it needs to be performed for the other 5 cities targeted in this project So, this stage is expected to be completed for the other 5 cities with the proposal stage (and they were included in the PFG request). At this same stage as for Durazno and Rivera we plan to advance into the planning strategy by doing the specific site selection for the NbS already prioritized and by delivering the design, cost budgeting and cost analysis for those solutions. At the same time, we propose to advance in making the site selection for the NbS prioritized for the other 5 cities.

35. With those activities completed in the proposal stage we plan to advance to the implementation stage of the project, under which the design of the NbS for the other 5 cities can be performed. To address that process some training activities must be enable. As for the NbS pilot implementation in all the steps proposed the flow and the start for each pilot differs. Regarding Durazno and Rivera cities, we can plan an early start, and it is only conditionate to some training and the specific implementation and construction biding arrangements. And the other 5 cities are required to complement the planning phase, as for the design of the NbS, cost analysis to start. The pilots to be tested for the private sector required some training and exchange as well for the design of the financial mechanism to tested. The following figure illustrates the interrelation between the roadmap phases and the expected outputs.

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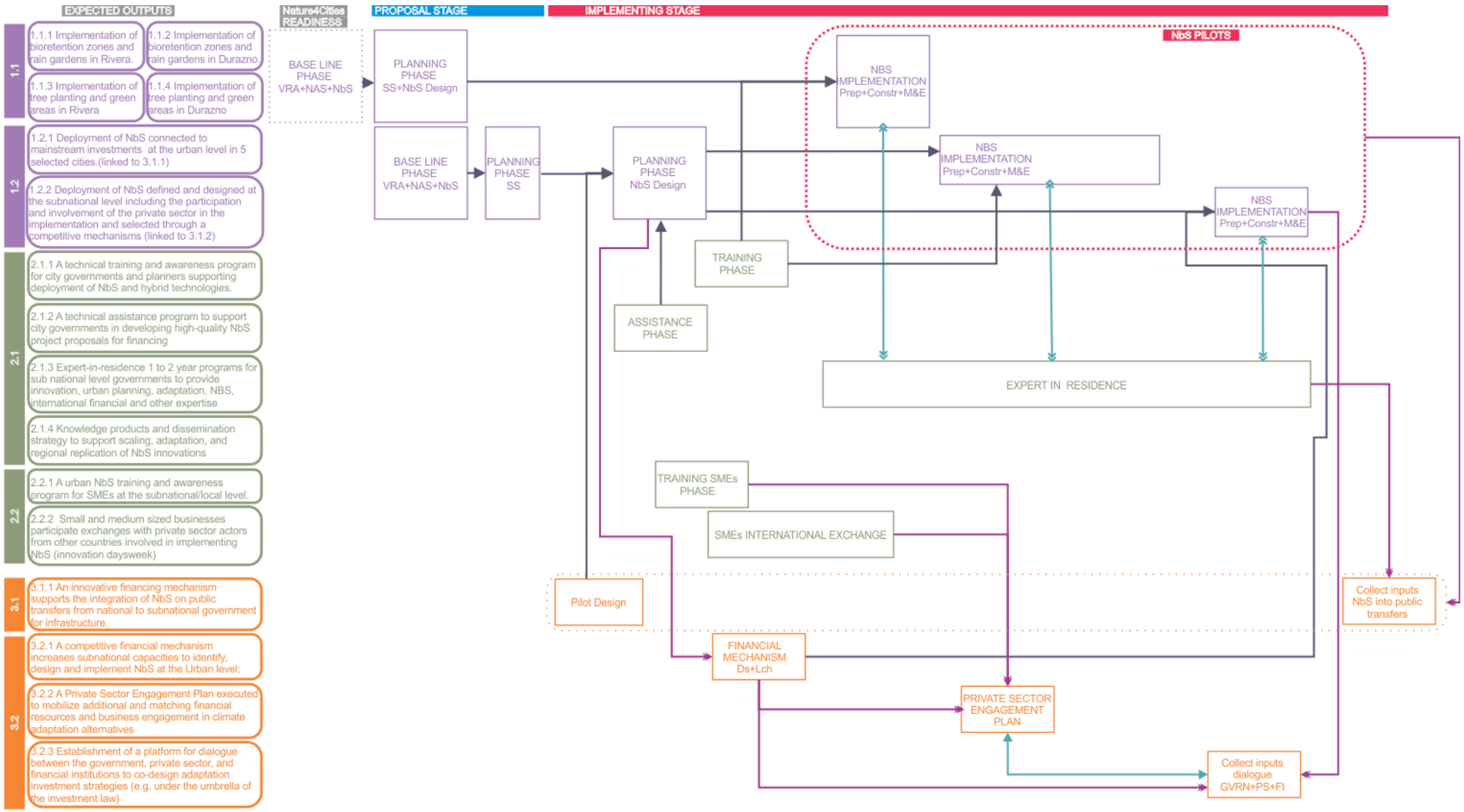

Figure 5 Interrelations between outcomes, outputs and project phases.

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36. With regards to the outcomes of component 1, outcome 1.1 provides an early implementation start to actions identified in a highly participatory process, while outcome 1.2 is an opportunity to escalate this process to other cities and implement actions as well at the same time it test the innovative mechanisms designed in component 3 while bringing together national and subnational actors from the public and private sectors and having the technical support to implement and extract lessons with the support of component 2.

37. Interventions that are not yet fully specified would be treated as unidentified sub-projects (USPs) within a fixed framework, limited to pre-defined typologies and urban areas. Within this framework, we distinguish between: (i) partially identified activities in Durazno and Rivera (typologies and catchments already defined, micro-sites and design parameters to be refined at funding proposal stage); and (ii) USPs within a fixed framework in other medium-sized cities, where NbS sub-projects will be selected through a competitive, criteria-based mechanism, but always within the same set of NbS (pre-defined) typologies and eligible cities. Elegibility/ exclusion criteria will be established at the funding proposal; risk screening tools will be provided through PFG stage.

38. Component 2 is linked to components 3 during the planning and design of the innovative mechanisms, it then links component 3 and 1 as it ensures technical support to produce proposals to be presented to output 1.2.2 and to enhance capacities of those private and public actors that will be implementing component 1 as a whole. Finally, it provides the necessary support to extract key lessons from the entire process.

39. The output under outcome 3.1 is designed to ensure the involvement of the public sector at the national and subnational level. Output 3.1.1 aims to help mainstream NbS into existing national mechanisms. It pursues the testing and adoption of innovative NbS by incorporating modifications to mechanisms familiar to both national and sub-national actors. Output 3.1.1 is linked to output 1.2.1. Outcome 3.2 is designed under a similar approach of modifying mechanisms familiar to private and public actors with the incorporation of innovative aspects that seek to involve the private sector in output 1.2.2.

40. In summary, Component 3 provides the enabling institutional and financial framework, which supports the implementation of NbS under Component 1. The successful deployment and demonstration of NbS in Component 1 generate practical insights and learning, besides improving resilience, feeding into Component 2, which focuses on capacity building and technical support for further scaling. The feedback loop ensures that experiences from pilot initiatives inform continuous improvement in policy frameworks and investment strategies.

41. Collectively, the components substant an innovative framework and delivery mechanism supporting climate finance; create the conditions for testing the capacity of sub-national governments and the private sector for adopting and executing adaptation alternatives to the effects of extreme temperatures and inundations through adaptation strategies like NbS and other hybrid solutions. The project will promote an evidence-based and inclusive process, respective of the local social, political, financial and technical context; raise the level of stakeholder consciousness needed to properly scale investments in climate adaptation. The project will assist Uruguay to develop a model of investing in adaptation measures recommended to counteract the expected effects of extreme temperatures, urban heat islands, and inundation in increasing levels of intensity and magnitude. Achievement of the three outcomes will require **innovative "systems" thinking**, processes, mechanisms, technology and a feedback loop to properly provide for learning and adaptation and eventually scaling.

Project/Programme Components	Expected Outcomes	Expected Outputs	Amount USD
Component 1. Increased resilience to Climate Change	1.1 Enhanced urban resilience	1.1.1 Implementation of bioretention zones and rain gardens in Rivera.	250,000
		1.1.2 Implementation of bioretention zones and rain gardens in Durazno.	250,000

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Project/Programme Components	Expected Outcomes	Expected Outputs	Amount USD
Effects through Innovation in adaptive strategies	through deployment and testing of NbS identified for Durazno and Rivera	1.1.3 Implementation of tree planting and green areas in Rivera.	250,000
		1.1.4 Implementation of tree planting and green areas in Durazno.	250,000
	1.2 Enhanced urban resilience and capacities through the identification, deployment and testing of NbS funded through the competitive funding mechanism	1.2.1 Deployment of NbS connected to mainstream investments at the urban level in 5 selected cities. (Linked to 3.1.1)	1,650,000
		1.2.2 Deployment of NbS defined and designed at the subnational level including the participation and involvement of the private sector in the implementation and selected through a competitive mechanism (linked to 3.1.2)	500,000
Component 2. Increased capacity to adopt and scale innovative NbS and hybrid technology alternatives.	2.1 Enhanced public sector capacity to plan and execute NbS projects	2.1.1 A technical training and awareness program for city governments and planners supporting deployment of NbS and hybrid technologies.	120,000
		2.1.2 A technical assistance program to support city governments in developing high-quality NbS project proposals for financing	120,000
		2.1.3 Expert-in-residence 1-to-2-year programs for sub national level governments to provide innovation, urban planning, adaptation, NBS, international financial and other expertise	349,100
		2.1.4 Knowledge products and dissemination strategy to support scaling, adaptation, and regional replication of NbS innovations	126,000
	2.2 Enhanced private sector capacity to incorporate and implement NbS alternatives	2.1.1 A urban NbS training and awareness program for SMEs at the subnational/local level.	50,000
		2.1.2 Small and medium sized businesses participate exchanges with private sector actors from other countries involved in implementing NbS (innovation days week)	50,000
Component 3. An enabling environment for increased investment in urban resilience to climate change effects	3.1 An institutional and Financial Framework to apply and scale NbS at the city level,	3.1.1 An innovative financing mechanism supports the integration of NbS on public transfers from national to subnational government for infrastructure.	70,000
	3.2 Private sector involved in incorporating climate adaptation technologies and services in their operations and infrastructure as well as incorporating NbS as a business line	3.2.1 A competitive financial mechanism increases subnational capacities to identify, design and implement NbS at the Urban level;	70,000
		3.2.2 A Private Sector Engagement Plan executed to mobilize additional and matching financial resources and business engagement in climate adaptation alternatives	50,000
		3.2.3 Establishment of a platform for dialogue between the government, private sector, and financial institutions to co-design adaptation investment strategies (e.g., under the umbrella of the investment law)	50,000

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Project/Programme Components	Expected Outcomes	Expected Outputs	Amount USD
Sub-total Components			4,205,100
Project execution costs (PMC + M&E)			424,600
Total Project/Programme Cost			**4,629,700**
Project/Programme Cycle Management Fee charged by the Implementing Entity			370,300
Amount of Financing Requested			**5,000,000**

Table 3 Project Components and Financing.

Projected Calendar:

Milestones	Expected Dates
Project Preparation	4/2026-3/2027
Start of Project/Programme Implementation	5/2027
Project Closing	4/2032
Terminal Evaluation	10/2032

Table 4 Projected Calendar

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42. The expected timeframe is a maximum of 5 years to carry out all the objectives. An indicative work plan is presented below to be refined during Project Formulation phase.

Project/Programme Components	Expected Outcomes	Expected Outputs	Sem 1	Sem 2	Sem 3	Sem 4	Sem 5	Sem 6	Sem 7	Sem 8	Sem 9	Sem 10
Component 1. Increased- resilience to Climate Change Effects through Innovation in adaptive strategies	1.1. Enhanced urban resilience through deployment and testing of NbS already identified	1.1.1 Implementation of bioretention zones and rain gardens in Rivera.										
		1.1.2 Implementation of bioretention zones and rain gardens in Durazno.										
		1.1.3 Implementation of tree planting and green areas in Rivera.										
		1.1.4 Implementation of tree planting and green areas in Durazno.										
	1.2. Enhanced urban resilience and capacities through the identification, deployment and testing of NbS selected from an existing catalogue with preselected options	1.2.1 Deployment of NbS connected to mainstream investments at the urban level in 5 selected cities. (Linked to 3.1.1).										
		1.2.2 Deployment of NbS defined and designed at the subnational level including the participation and involvement of the private sector in the implementation and selected through a competitive mechanism (linked to 3.2.1).										
Component 2. Increased capacity to adopt and scale innovative NbS and hybrid technology alternatives.	2.1. Enhanced public sector capacity to plan and execute NbS projects	2.1.1 A technical training and awareness program for city governments and planners supporting deployment of NbS and hybrid technologies.										
		2.1.2 A technical assistance program to support city governments in developing high-quality NbS project proposals for financing.										
		2.1.3 Expert-in-residence 1-to-2-year programs for sub national level governments to provide innovation, urban planning, adaptation, NBS, international financial and other expertise.										
		2.1.4 Knowledge products and dissemination strategy to support scaling, adaptation, and regional replication of NbS innovations.										
	2.2 Enhanced private sector capacity to incorporate and implement NbS alternatives	2.2.1 An urban NbS training and awareness program for SMEs at the subnational/local level.										
		2.2.2 Small and medium sized businesses participate in exchanges with private sector actors from other countries involved in implementing NbS (innovation days week).										
Component 3. An enabling environment for increased investment in urban resilience to climate change effects	3.1. An institutional and Financial Framework to apply and scale NbS at the urban level	3.1.1 An innovative financing mechanism supports the integration of NbS on public transfers from national to subnational government for infrastructure.										
	3.2. Private sector involved in incorporating climate adaptation technologies and services in their operations and infrastructure as well as incorporating NbS as a business line	3.2.1 A competitive financial mechanism increases subnational capacities to identify, design and implement NbS at the Urban level.										
		3.2.2 A Private Sector Engagement Plan executed to mobilize additional and matching financial resources and business engagement in climate adaptation alternatives.										
		3.2.3 Establishment of a platform for dialogue between the government, private sector, and financial institutions to co-design adaptation investment strategies (e.g., under the umbrella of the investment law).										

Table 5 Indicative Work Plan.

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PART II: PROJECT / PROGRAMME JUSTIFICATION

A. Describe the project / programme components, particularly focusing on the concrete adaptation activities, how these activities would contribute to climate resilience. For regional projects describe also how they would build added value through the regional approach, compared to implementing similar activities in each country individually. For the case of a programme, show how the combination of individual projects would contribute to the overall increase in resilience.

Component 1. Increased- resilience to Climate Change Effects through Innovation in adaptive strategies

43. The project will test the ability of the city governments[1] and the private sector to support increased resilience through planning and successful execution of NbS and hybrid technologies. The project will do so through two expected outcomes oriented to the different sectors:

    Outcome 1.1: Enhanced urban resilience through deployment and testing of NbS already identified;

    Outcome 1.2: Enhanced urban resilience and capacities through the identification, deployment and testing of NbS selected from an existing catalogue with preselected options.

44. Outcome 1.1 builds on the work of the Nature4Cities project, which identified, prioritised and consulted alternatives of NbS for both Rivera and Durazno. Outputs 1.1.1, 1.1.2, 1.1.3 and 1.1.4 will test NbS interventions in each city with direct funding through the project's funding facility. 1.1.1 and 1.1.2 will consist of the development of bioretention zones and rain gardens in Durazno and Rivera. The definition on the exact location will be decided during the fully development proposal phase, as well as the design, cost budgeting and cost analysis from an NbS portfolio already prioritized for both cities. These technologies have not been tested in these cities and represent an opportunity to showcase their value for adaptation to flooding and heat waves. Output 1.1.3 and 1.1.4 will implement the improvement of green areas and planting trees in the public spaces at each city. The locations and species will be prioritised and validated through consultations with local stakeholders. This is an important milestone for Rivera, which urban area has a low percentage of tree coverage.

45. Outcome 1.2. is designed with two separate outputs, one directed at scaling NbS into infrastructure projects receiving national government funding and another through a competitive process for projects directly designed by sub-national governments with participation from the private sector.

46. Output 1.2.1. expands the number of cities to include the rest of the medium sized cities in the watershed. The Project Formulation stage, for which a project formulation grant is being requested, will be used to develop 5 vulnerability and Risk assessments for Trinidad, Young, Mercedes, Tacuarembó and Paso de los Toros. Output 1.2.1 will then focus on NbS designed to be implemented in parallel with infrastructure being presented for national funding such as the FDI or the PDGS. Funding from output 1.2.1 will complement existing funding from FDI or PDGS to ensure that NbS are not seen as an imposition to sub-national governments that reduces available funding but a complement that makes the project more attractive. The project's funding facility will consider proposals from cities, to apply for NbS solutions complementary to infrastructure and in line with the vulnerability assessments. This will allow the testing of NbS in a context of collaboration between the national and subnational authorities.

47. Output 1.2.2 will also build from the vulnerability assessments and with this information, plus the technical support from component 2 and a catalogue of pre identified potential NbS, these cities with participation from the private sector in the implementation will be invited to compete for funding for NbS solutions through the bases established in output 3.2.1.

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48. The following table include the types of NbS to be pilot. This pre-selection responds to the experience with Nature4cities Nature Adaptation plans elaborated through workshops with NbS task groups in Durazno and Rivera.

	Nbs	Types	Primary Attended Impact	Secondary Attended Impact	Co-Benefits	Design Parameters
Blue Green Infrastructure (BGI)	Urban Forestation: Refers to urban parks integrated into regional networks	Phytoremediation forests Ecological-forest corridors Agroforestry	HEAT WAVES		Ecological-forest corridors, Soil recovery, Carbon sequestration and storage, Tourism and recreation, Resource production	They can be integrated into conservation areas, slope stabilization, development of green areas and public parks. Area: Small to extra-large, ideally planned at landscape or city scale. Land use: afforestation of degraded natural forest areas, alluvial sites along streams, rivers, and water bodies, steep slopes at risk of soil erosion and landslides, non-productive agricultural sites, and industrial timber plantations that are no longer productive.
	Green Spaces:	Pocket parks Natural parks Residential gardens Squares			Social interaction, Biodiversity, Health, Stimulation of local economies and Job creation, Carbon storage and sequestration, Tourism and recreation, Reduction of heate stress	Integrated into environmental conservation actions, parks, green infrastructure, urban developments, regeneration, reuse of vacant land. Area: From small to large, they can be designed for application at the neighborhood, district, or city scale. Land use: parks, gardens, plazas, streets, outdoor sports facilities, and vacant lots that may receive vegetation.
	Green corridors: Corridors integrated into the city's green area system	Micro corridors: streets, avenues, trees on properties. Macro corridors: streets, avenues, boulevards.		DROUGHTS COLD WAVES FLOODS	Cultural, Biodiversity, Health, Carbon storage and sequestration, Tourism and recreation, Reduction of heat stress	Integrated into environmental conservation actions, they connect parks, green infrastructure, urban developments, regeneration, reuse of vacant land. Area: from small to large, they are suitable for application at the neighbourhood, district and city scale
	Building solutions: Green surfaces, water capture, reuse and storage devices, temperature control systems, air conditioning, food production elements	Extensive Green Roofs Intensive green roofs (gardens, orchards, etc.) Green façades from substrates in the ground Green facades with roots, built-in substrates and irrigation systems.		COLD WAVES FLOODS	Water quality and sediment control, Social interaction, Biodiversity, Education, Health, Resource production, Reduction of heat stress	Applicable to different uses, requires access to properties, can have very varied costs, conditioned by local costs, and scope of interventions, Area: from small to medium. Land use: residential, public, commercial and office buildings, convention centres and large utility structures.
	Renaturation of rivers and streams	Renaturation of edges and background Stream detubing Bioengineering techniques Riparian Restoration		EROSION COLD WAVES	Water quality and sediment control, Social interaction, Biodiversity and health, Stimulation of local economies and job creation, Tourism and recreation, Culture	It can be integrated into processes of eco-conservation, water management, development and restoration of green areas, public parks. Area: Medium to extra-large, appropriate for a neighborhood, district, city, and watershed scale. Land use: multifunctional use
Water-Sensitive Urban Design (WSUD)	Sustainable Drainage Systems: Typically, shallow areas of vegetative depressions capable of intercepting, infiltrating, shunting, modifying flows and velocity in the treatment of storm drain flows.	Natural bead-trenches Rain Gardens Flood tree pits Permeable/Green Surfaces Buffer Gaps Retention gaps Bio-Retention Areas Rainwater Harvesting Systems	FLOODS	DROUGHTS HEAT WAVES	Water quality and sediment management, Social interaction, Biodiversity, Education, Stimulation of local economies and job creation, Carbon storage and sequestration	They can be implemented as part of a street renovation, urban drainage system upgrade, and/or capacity expansion, as local green initiatives or as the installation of stormwater drains for new development areas. Area: They require small to medium spaces. They are usually designed for application on a neighbourhood scale in general in public space. Land use: Residential, commercial and industrial streets and infrastructure networks, urban parks of various types, squares, gardens, parking areas and private gardens.
	Constructed wetlands: Similar to natural wetlands in appearance, they are built as parts of the engineering system of water infrastructures to use natural processes in wastewater treatment, carbon sequestration and adaptation.	Free runoff surfaces, Groundwater Flow Wetlands			Water quality and sediment management, Biodiversity, Stimulation of local economies and job creation, Carbon storage and sequestration, Tourism and recreation, Resource production	They can be implemented in urban parks, residential, commercial, industrial green areas, in small to medium sizes. Integrated into the city's green area system and storm drainage system, as part of existing systems or for expansions. Area: Small to medium, generally designed for application at neighborhood and city scale. Land use: urban parks and green areas in residential, commercial or industrial areas, as well as the main infrastructure networks.
	Floodplains: Refer to the recovery, restoration, conservation of flood plains (room for the river)	Recognition, restoration and/or conservation of riparian ecosystems		EROSION COLD WAVES	Water quality and sediment management, Biodiversity and carbon sequestration, Tourism and recreation. Resource production, Reduction of heat stress,	They are often key structuring elements of cities and an integral component of open space networks and recreational areas. Area: Medium to Large: River floodplains range from those associated with smaller rivers and streams to large, city-scale floodplains. Land use: they should be set aside as natural open spaces and activities should be limited or restricted only for uses compatible with the recurrence of flooding.

Table 6 NbS typologies Portfolio.

49. From this portfolio and with the vulnerability and climate risk maps the groups essayed a multicriteria selection process to prioritize the NbS to be implemented. This same process is expected to be conduct with the new 5 cities where the project will scale de NbS pilots. The multi-criteria methodology will follow the following steps:

50. Gathering information for the criteria to be used. Criteria: Reduction of climate and disaster risks, Provision of ecosystem services, Technical feasibility, Implementation cost, Maintenance cost, Implementation time, Time until results are achieved, Durability, Integrability, Social benefits, Equity.

51. Assigning weights to each criterion on a free range from 1 to 100.

52. Scoring each criterion from 1 to 5 on a scale from 'does not meet' to 'is effective'.

53. Through this process, the project seeks to diversify its portfolio of experiences and will seek to fund NbS solutions that offer new or more complete information. The selection process to be developed in output 3.2.1 will focus on portfolio diversity, opportunities to test theories more completely or

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enable comparisons, involvement of the private sector, potential for scaling, response to risk assessment conclusions and gauging experiences with new and distinct groups of stakeholders. Each additional project funded will be added to the project's results framework as a project.

54. These experiences would have the same rigorous third-party monitoring and evaluation facilitating a feedback circuit. As a result of Component 1 outcomes, the project will directly enhance urban resilience by piloting NbS, and seek feedback on results and lessons learned on the functionality, operability, and socio-cultural, economic, financial and political dynamics associated with each.[2]

Component 2 Increased capacity to adopt and scale innovative NbS and hybrid technology alternatives.

55. The component includes, an outcome focused on the public sector and one on the private sector at the subnational level.

Outcome 2.1 Enhanced public sector capacity to plan and execute NbS projects

Outcome 2.2 Enhanced private sector capacity to incorporate and implement NbS alternatives

56. This component focuses on ensuring that technical capacities needed to plan and implement NbS are enhanced at the subnational and local levels both within the public and relevant private actors. Given the current level of exposure to NbS this is a key element to support the implementation of component 1 and should begin early in the project process so that it can also support the preparation of mechanisms under component 3. By doing this, the component will increase the capacity of small and medium sized cities to access opportunities to implement NbS.

57. The Knowledge Management and Learning (KML) play a key role in a dynamic feedback loop whereby lessons obtained from closely monitored pilot systems (Component 1) are systematically distilled and disseminated. This process will support the adaptation or redesign of the NbS or hybrid measures based on their performance. This iterative process allows the project to adapt and scale successful solutions while discarding those that prove ineffective. Lessons learned from both successes and failures will need to be systematically documented, offering valuable insights to guide future investments and foster effective public-private partnerships. This comprehensive strategy ensures that the knowledge generated through Components 3 and 1 not only supports project implementation but also builds a strong foundation for long-term resilience and innovation.

Outcome 2.1 Enhanced public sector capacity to plan and execute NbS projects

58. The outcome focuses on the unique characteristics of the public sector, notably sub-national governments within the Rio Negro Watershed. It seeks to enhance their technical capacities to plan, budget, and engage in NbS proposals as part of their infrastructure development process. As mentioned, subnational governments in Uruguay, particularly in smaller urban areas, often face significant challenges in accessing financing and developing complex urban projects due to limited technical capacity and overstretched personnel. In many cases, in-house experts are fully engaged in daily operational responsibilities, leaving little time to explore new technologies, innovative approaches, or funding opportunities. This structural limitation prevents municipalities from effectively planning, designing, and managing urban resilience initiatives, including those required to compete for the financial resources described in Outcome 3.1.

59. Output 2.1.1. is a technical training and awareness program for city governments and planners supporting the deployment of NbS and hybrid technologies. A training needs assessment will be undertaken to support the development of training curriculum and concepts. It will be appropriate to use information from the private sector program (2.2.1) and vice versa while focusing on the skills that differentiate city planners from the private sector. Training will focus on practical exercises within the city environment and surroundings. Spatial analysis and decision-making to respond to phenomena, such as inundations, require multiple and diverse interventions that often require

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combinations of NbS and infrastructure and the use of innovative tools to make those determinations. Institutions like the Cities Adaptation Group and other national assets will be consulted in the project formulation phase to define the variables and tools that must be considered in elevating the capacity in small and medium sized cities. Like the previous outcome, training and its effects will have third party monitoring to define the effectiveness of the training process, adaptation in the types of tools applied and their use, etc. Monitoring of progress will give feedback into the capacity building process. The training programs can be tested in Rivera and Durazno to advance the process in those jurisdictions. Once adapted will become knowledge products for re-deployment in other cities.

60. Output 2.1.2 is a technical assistance program oriented to bridge the capacity gap by providing direct technical assistance to city governments in preparing high-quality, competitive NbS project proposals for financing through the project's financing facility developed in output 3.2.1 and implemented in output 1.2.2. the National Agency for Research and Innovation (*Agencia Nacional de Investigación e Innovación- ANII*) will facilitate the support program providing technical assistance as needed in feasibility assessments, financial structuring, and proposal development, ensuring that municipalities can present strong, well-structured, and fundable NbS initiatives that meet financing eligibility criteria. In addition to enabling municipalities to effectively access competitive funding, this output will also support their participation in the broader NbS design process, fostering alignment between urban resilience planning and available financial resources. By building local capacity, creating structured pathways to funding, and integrating innovative solutions, Output 1.2.2 will empower subnational governments to successfully implement NbS interventions and strengthen the long-term sustainability of climate adaptation efforts in urban areas.

61. Output 2.1.3 further supports the process through an Experts-in-Residence Program, an initiative designed to strengthen the technical and strategic capacities of subnational governments in urban planning, innovation, climate adaptation, nature-based solutions (NbS), and international financing. Support will be tailored for cities and municipalities with limited technical expertise, the program embeds seasoned professionals into local government teams to provide hands-on support, mentorship, and knowledge transfer. Experts are selected based-on their specialization in areas like urban design, infrastructure development, fiscal management, or environmental adaptation to work directly with municipal officials to diagnose challenges, co-develop practical solutions, and implement projects that align with local priorities. Key program goals include enhancing urban resilience, integrating NbS into urban strategies, fostering digital innovation, and improving access to financial mechanisms. The real planning and implementation of projects stemming from these collaborative outcomes will help ground the residency program in practical reality. This ensures that solutions are context-specific and actionable while fostering a closer, more meaningful exchange between the experts and local government staff.

62. To support the feedback loop and to convey the successes and lessons learned from the pilots, the project will disseminate knowledge and learning through knowledge products (output 2.1.4.) to be derived from the piloted innovations. Knowledge products are part of the strategy for scaling of innovative NbS and hybrid technologies, modification, or abandonment based on lessons learned. Develop training and dissemination programs for local authorities, CSOs, and residents on climate adaptation and NbS management. The project will also sponsor events or workshops to share project outcomes with other vulnerable cities in Uruguay, promoting regional replication. Learning events and activities e.g., innovation week or technical expos. Events that place stakeholders in contact with new solutions, ideas and help to develop a culture of innovation. The nature and types of events would be considered during the fully development proposal phase through a consultative process.

<u>Outcome 2.2</u> Enhanced private sector capacity to incorporate and implement NbS alternatives

63. Outcome 2.2 is designed to build a strong local private sector base for NbS implementation, ensuring that NbS solutions become commercially viable beyond project-specific technical assistance. As part of a strategy to scale NbS, Outcome 2.2 aims to test the ability and potential participation of small

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and medium-sized enterprises (SMEs) to provide NbS and hybrid infrastructure solutions. Profit making alternatives can help abate effects of climate change, such as high temperatures, through accessible solutions. The project will determine if SME can support scaling of NbS through commercially viable ventures.

64. Output 2.2.1. An urban NbS training and awareness program for SMEs at the subnational level is oriented to expose SMEs to NbS business alternatives, appropriate technologies, and establish connections with suppliers of ideas and technologies. The project will execute a training needs assessment and subsequently will develop a comprehensive training curriculum and certification program tailored for SMEs. The program will deliver training to SMEs on the results and recommendations from the N4C project and in the technologies indicated to abate the effects of climate change identified in the Vulnerability and Risk Assessments. The training will cover solutions indicated for cities and introduce new ideas, such as, for example, green roofing, vertical gardens, landscaping, bioswales, rain gardens, permeable pavements, stormwater management solutions, and the use of natural and sustainable building materials. Training will approach NbS as business opportunities. It will include workshops covering NbS design, installation, and maintenance, as well as business coaching on pricing strategies, market access, and financial planning. Additionally, SMEs will receive guidance on local regulatory requirements and certification processes for NbS projects. This will be done in coordination with experts involved in the project through component 2, in particular but not only those participating from the expert in residence program 2.1.3.

65. By equipping SMEs with these skills, the initiative seeks to integrate NbS solutions into their service offerings, the project will test the financial sustainability for the businesses and scalability from within the private sector. To gauge results, a monitoring framework will be established to track SME participation and measure business participation and growth. Feedback from SMEs is critical to adapting the program, rewiring if warranted, and adjustments to be made for deployment at a larger scale and time horizon. Business opportunities will be financed through facilities in Component 3.

66. Output 2.2.2 strengthens SMEs' business models and technical expertise by exposing them to real-world applications and successful NbS strategies from other markets. A technical exchange program provides for learning between SMEs implementing or providing technologies appropriate to the local context. The range of options for linkages will be identified through a scoping exercise and will be undertaken during the project formulation stage. The project would draw from ANII`s network of experiences in financing innovation and SMEs. Through that process, the project will scope existing models throughout the region that can be transferred. Experiences such as the Green Roof initiatives in Brazilian Favelas demonstrate business opportunities in areas of challenging socio-economic dimensions. Importing global experiences is another option that will be explored, such as tested NbS, hybrid and technology solutions financed by the Adaptation Fund's innovation program. The formulation stage will include the short-term contracting of a global NbS expert to assist in identifying the appropriate models and sources, among other global options for learning and technology transfer. Other options can be generated through financing of innovative ideas as presented in outcome 3. The diversity of options will be vetted during the project formulation stage.

67. Through networking exchanges SMEs gain exposure to innovative NbS technologies, successful case studies from different countries, and gain exposure to contacts with technology providers. By accessing international best practices, SMEs are encouraged to innovate, collaborate, and scale their NbS services. Experience gained and lessons learned as the project moves forward can then be part of learning exchange activities to showcase experiences tested from within the region, such as an innovation event similar to the Adaptation Fund's Innovation Days and organizing events in regular expos in Uruguay such as the Expo Uruguay Sustainable *(Expo Uruguay Sostenible)* or the Construction Expo *(Feria de la Construcción)* that take place yearly.

Component 3. An enabling environment for increased investment in urban resilience to climate change effects

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68. Building on Components 1 and 2, Component 3 strengthens the policy, institutional and financial conditions needed to mainstream and scale urban NbS. It does so through two complementary outcomes—one led by the public sector and one catalyzing private sector participation—so that tested solutions can be financed, adopted and expanded across cities in the Río Negro basin.

Outcome 3.1. An institutional and Financial Framework to apply and scale NbS at the urban level;

Outcome 3.2. Private sector involved in incorporating climate adaptation technologies and services in their operations and infrastructure as well as incorporating NbS as a business line.

69. The realization of the first outcome will scale NbS, integrating it into public transfers and mainstreaming it into the biggest urban funding sources. Therefore, it is linked to the successful deployment and documentation of the NbS business case. The second outcome seeks to encourage the private sector to incorporate NbS (for example into their own infrastructure) and to consider it as a business opportunity. It also seeks to enhance and adapt existing mechanisms that could allow NbS into the mainstream. The pathway for the realization of the expected outcomes is defined as follows:

Outcome 3.1. An institutional and Financial Framework to apply and scale NbS at the urban level.

70. The outcome will be realized through two tracks. In the first, the project will work with the relevant agencies to develop a proposal for an innovative financing mechanism (Output 3.1.1.) that supports the integration of NbS on public transfers from national to subnational governments for infrastructure. As described, the concept of funding NbS has not yet gained traction with the key funding instruments for subnational governments: the FDI and the PDGS. The project will analyze the options and work with agencies to define the architecture and expand the portfolio of eligible investments that include NbS and hybrid green and green-grey infrastructure. Specifically, the project will seek to ensure that project funds to pilot NbS (Component 1, outcome 1.2.1) are integrated into the planning stages of traditional infrastructure being designed for financing through government sources. The opportunity to test NbS at this scale and with the intervention of both national and subnational public actors in the planning, and private actors in the implementation, could provide the necessary piloting and feedback that is required to ensure that NbS recommendations are considered by key national and subnational decision makers as a core component of infrastructure packages for future funding cycles. These cases will also serve to test the transfer mechanism and generate critical inputs for the incorporation of NbS in future infrastructure packages.

71. By developing an institutional and financial framework, the project will strengthen governance and financing mechanisms to integrate Nature-based Solutions (NbS) and hybrid infrastructure into national-to-subnational public transfer systems. This will ensure that climate adaptation becomes an embedded priority in urban infrastructure planning and investment decisions. The pilot testing of NbS within traditional infrastructure projects will generate valuable data and insights, directly shaping policy decisions, budget allocations, and investment strategies at both national and local levels. Additionally, the structured financing mechanism, developed in collaboration with CND and ANII, will support a demand-driven approach, facilitating targeted investments and effective monitoring to enhance long-term sustainability.

Outcome 3.2. Private sector involved in incorporating climate adaptation technologies and services in their operations and infrastructure as well as incorporating NbS as a business line.

72. The expected outcomes support innovation from different perspectives within governments, the private sector, and in combination. Complementary to the previous outcome, outcome 3.2 is focused on building the financial architecture to ensure that NbS enters key funding streams to cities by expanding the impact of the private sector in supporting resilience to climate change.

73. Concurrently with the output 3.1.1, output 3.2.2 will develop the architecture, protocols and procedures of the delivery mechanism supporting a demand-driven and competitive process to select and deliver funding to pilot investments in line with recommendations for resiliency. The project will

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support design and structure the fund pilot initiatives. Through that facility, the qualification, delivery, monitoring and support functions will be facilitated. The NbS facility for mechanism will ensure a fluid and result-based funding stream between the project and the participating urban governments and contractors. The funds will be obligated to the pilot projects through component 1, outcome 1.2. and will run parallel to the funding stream discussed in the previous paragraph.

74. A Private Sector Engagement Plan (Output 3.2.2.) will be executed to mobilize additional resources and alternatives to engage the private sector such as matching financial resources, seed funding, blended finance or other alternatives that help to leverage private investment for climate adaptation. The private sector is needed to scale the investments beyond a level that can be achieved through public sector possibilities. A range of options and strategies will be explored including potential offsets, corporate and social responsibility strategies, compensation, land value capture instruments and other existing mechanisms that need to be promoted or improved.

75. By mobilizing private sector engagement (Outcome 3.2), the project will broaden the landscape for innovation and investment in climate adaptation technologies and services. The integration of green and hybrid infrastructure solutions into key funding streams will expand opportunities for business-to-business collaboration, incentivize private financing, and foster cross-sector partnerships in areas such as water efficiency, wastewater recovery, urban cooling, and flood management. Through the Private Sector Engagement Plan, additional financial resources will be leveraged, accelerating the scaling of climate-resilient investments beyond what public funding alone can achieve.

76. Ultimately, these efforts will enhance urban resilience by ensuring cities are better equipped to withstand extreme temperatures, flooding, and other climate risks. The project's approach establishes a scalable, replicable model for integrating NbS into urban development frameworks, driving the transition toward a climate-resilient, sustainable urban future in Uruguay and beyond.

B. Describe how the project /programme would promote new and innovative solutions to climate change adaptation, such as new approaches, technologies, and mechanisms.

77. The project promotes innovative solutions to climate adaptation through several approaches, technologies and mechanisms.

78. **(i) Generating demand through awareness raising and capacity building** (a program with potential for national scale-up): The approach is to raise the awareness and technical capacity of local authorities and businesses to comprehend the potential climate change related shocks and the options for adapting to them at the local-level through nature-based solutions.

79. (ii) **Existing solutions, but new for the local context (roll-out)**: Experiences from Rivera and Durazno will be scaled up and adapted to five other cities in the watershed. While NbS are proven internationally, their application in medium-sized Uruguayan cities is unprecedented and will generate transferable lessons. The concepts of climate vulnerability and risks and their associated costs to cities in the Rio Negro Basin are relatively unknown. The project will build on a baseline effort implemented by the Nature4Cities initiative where Climate Vulnerability and Risk Assessment and Nature based urban adaptation plans were completed for two cities in the watershed: Durazno and Rivera. The project will prioritize, select and pilot from those recommendations. These include, for example, vegetated waterways, vegetated water absorption structures for flood mitigation, green roofing and walls for cooling or heat abatement, etc. The list of options is defined in a catalogue of NbS oriented to the recommendations of the Vulnerability and Risk Assessments. The vulnerability studies provide recommendations for NbS and their prioritization, provide learning opportunities with information for public consumption, and are essential early steps to targeting and planning investments in resilience against damages due to the effects of extreme temperatures and inundations. The process of integrating NbS and green-grey combinations into the city planning and engineering process is innovative for Uruguay's small and medium sized cities.

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80. (iii) **New innovations encouraged and accelerated**. To promote new technologies, the project will engage the private sector in promoting resilience. It is expected that large, medium and small businesses, by connecting with currently non-existent business opportunities related to NbS -such as "green roofing," designing semi-permeable ponds, or providing stock for vegetated waterways- could generate revenues while promoting efficient technologies and enhance resilience to the mentioned climate change effects. The project will support activities that enable private sector, business to business exchanges between suppliers of efficient technologies in water, cooling, energy conservation, chilling, etc.

81. (iv) **New public and private financing mechanisms (new/pilot)**: The project will test mechanisms and capacities for funding NbS and hybrid solutions. The results of the project will help establish the potential of the integration of NbS into established governmental funding streams. Demonstrated positive results will convince public officials to consider blended solutions and unlock larger pools of funding for NbS. Because NbS are relatively unknown by local decision-makers and are not recognized as an eligible and complementary component of grey infrastructure projects, these are not considered within existing funding opportunities. Public officials have indicated that an effective demonstration of the responsiveness and acceptance of Uruguayan cities, positive results from successfully piloted NbS, and success in facilitating cities to access funding will justify the inclusion of adaptation measures into mainstream funding much faster than without an Innovation project. With an innovation grant, the relevant counterparts are willing to accept the higher levels of risk associated with pilot projects in new social scenarios.

82. Together, these four dimensions—technological, contextual, financial, and institutional—form a comprehensive climate innovation approach that aims not only to test solutions but also to create the demand, mobilize financing, and built capacities required for SbN to become a stable and scalable component of urban adaptation in Uruguay.

83. The project plans to deliver outcomes through a financial mechanism that channels funds into local NbS implementation, promoting evidence to inform existing finance mechanisms and catalyze NbS-based adaptation actions. For this some innovative system thinking is required in how the pilots are delivered and how the results promote the evidence required to inform the existing public and private financing mechanism and incentives. In the following figure we address how the innovative financing mechanism supports and learns from the NbS pilots and capacity-building activities to achieve the intended transformational outcomes.

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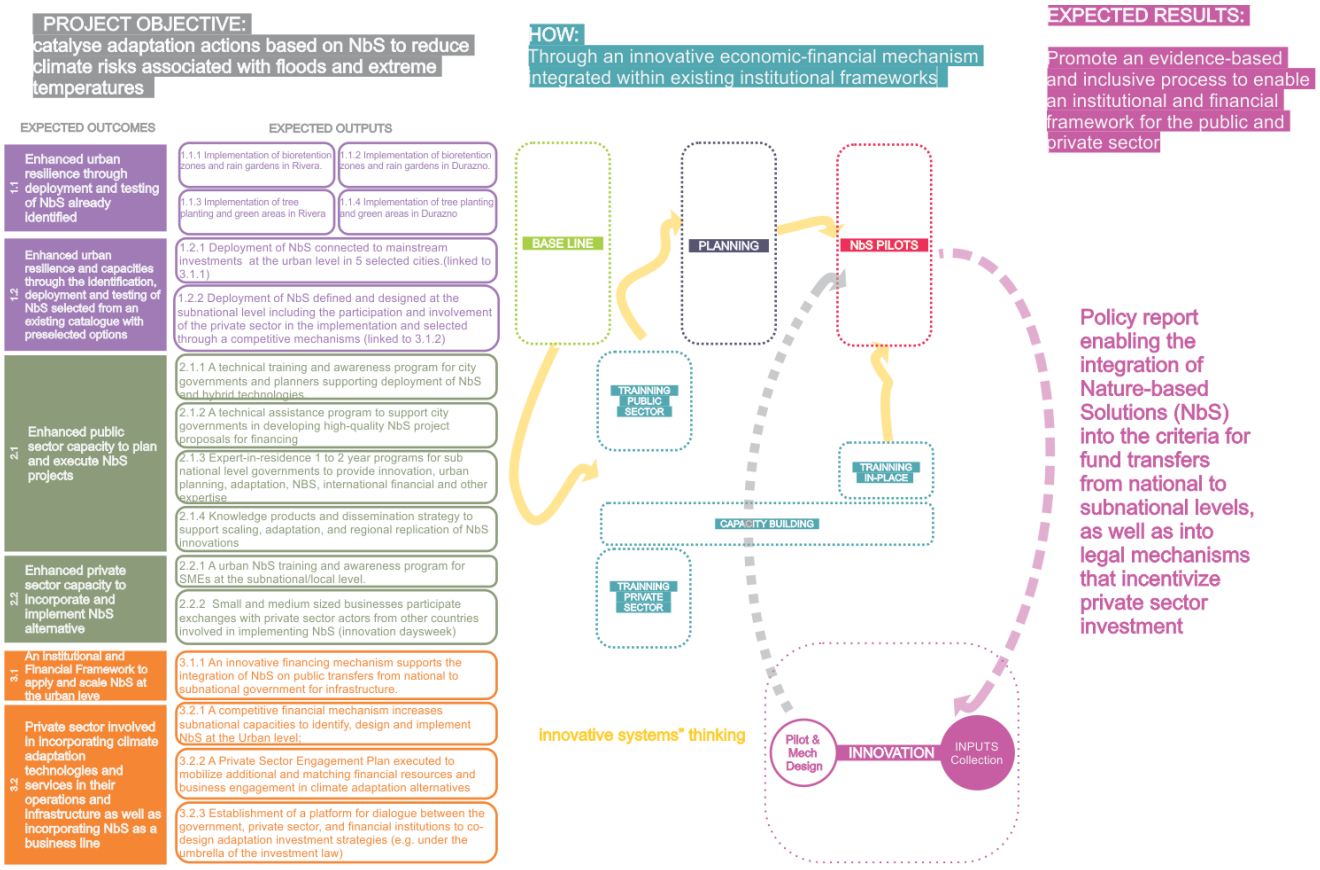

Figure 6 Innovation Pathway.

C. Describe how the project/programme aims to roll out successful innovative adaptation practices, tools, and technologies and/or describe how the project aims to scale up viable innovative adaptation practices, tools, and technologies.

84. Nature4Cities was a preparatory project, implemented by UNEP in seven countries in the region, reaching 13 cities. In Uruguay, the project worked with the cities of Durazno and Rivera. Among the project's activities, local working groups were formed, integrating representatives of national and local government, public companies, institutions representing the private business and productive sectors, and local tertiary-level academia. This process enabled the introduction of the topic and the training of stakeholders from different sectors regarding NbS (Nature-based Solutions) and climate change adaptation, and this type of approach was innovative for the two localities where it was implemented. The involvement and interest of the participants, as well as their commitment, enriched the analyses and led to more precise identification of planning proposals. Among these results, several recommendations were identified that highlighted the need for an innovative component for upscaling and implementation. The most relevant include:

85. The need to generate evidence about NbS at the local scale, evaluating their multifunctional values and their complementarity with gray infrastructure.

86. Assessing the feasibility of integrating NbS as an implementation criterion in the execution of infrastructure works with resource transfers from the national to the subnational level. For this, it was identified as necessary to develop pilot projects that could be evaluated in their processes of integrating these measures with other infrastructures, in the training and information needs for technicians and decision makers, in the use of financial resources, as well as in the resistances and difficulties for the effective realization of the measures.

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87. Integrating NbS into departmental budgets and development projects, considering adjusting investment criteria for mixed works and the allocation of resources for maintenance and sustainability of the measures.

88. Promoting the linkage of incentive and promotion mechanisms with adaptation tools that, at the level of eligibility criteria, consider location risk guidelines, risk assessments for access to credit and financing, public-private partnerships, etc.

89. The project will seek to establish a transformational process that will combine learning in support of systems thinking, test a financing modality and mechanism that can complement and scale baseline investments.

90. The following diagram shows in a syntactic way a roadmap of activities and phases that structure the project, intime and with preliminary entities involved:

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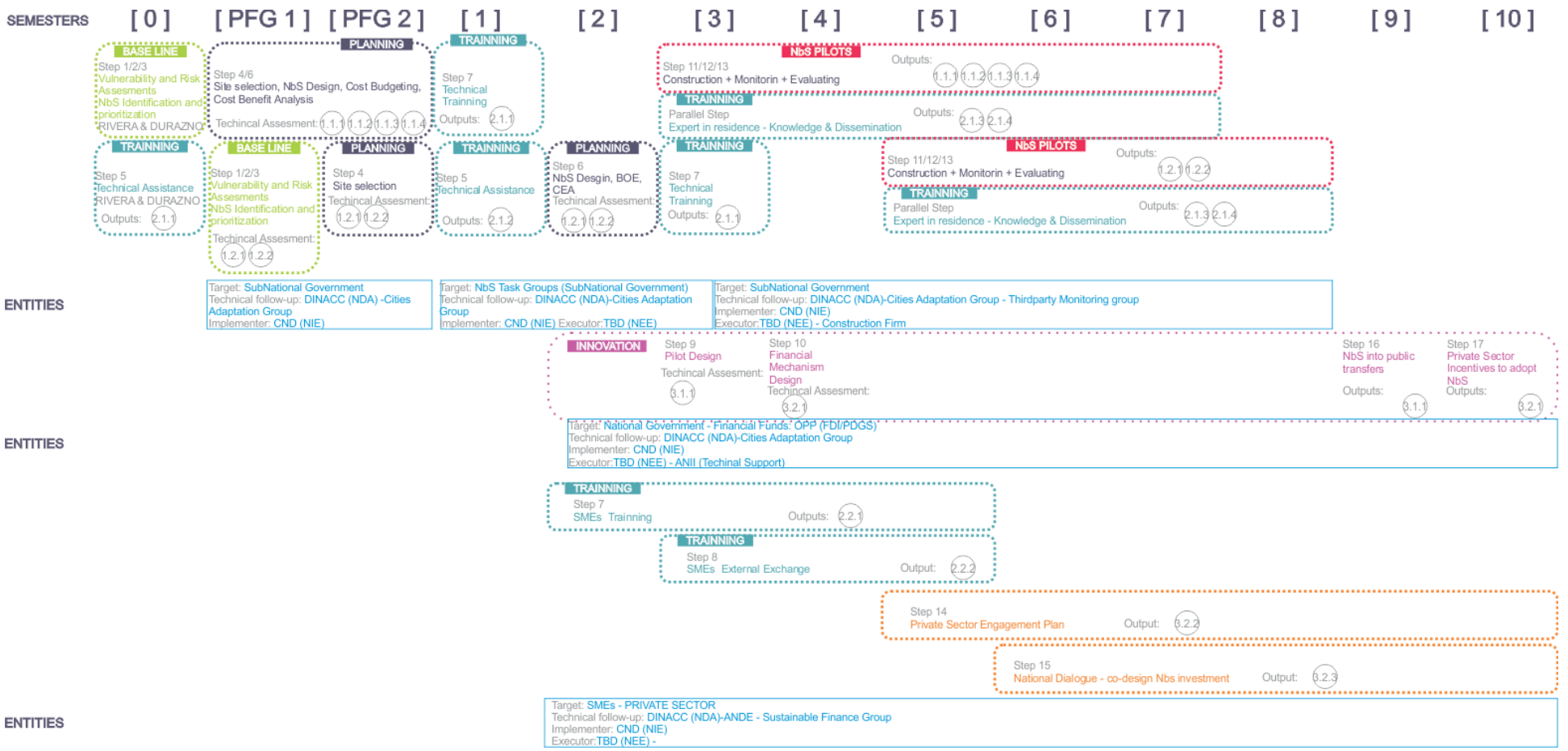

Figure 7 Roadmap timeline

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91. The project aspires to test NbS in medium sized Uruguayan cities. It will use that experience to inform a parallel yet transformational financing process that will enable scaling of NbS and their benefits to all cities in the Rio Negro watershed and beyond. It will do so through a 5-step strategy: (i) build demand to increase resiliency through knowledge and awareness of the alternatives and benefits of NbS and raising knowledge to a wide audience of stakeholders; (ii) design and test an innovative financing modality and mechanism (including a competitive window and integration into intergovernmental transfers) to complement and scale baseline public investments; (iii) implement NbS in seven cities to test acceptance, bottlenecks, and implementability; (iv) conduct consultation, discussion and feedback to inform redesign through an iterative learning loop and M&E; and (v) disseminate results and proposals for financing modalities for NbS and hybrid solutions.

92. A successful roll-out will depend on achieving buy-in or demand for increased resiliency, that will be strengthened by consciousness raising and education in the use of NbS as an integrated part of the urban development process. The key recommendations and lessons from the N4C analysis for Durazno and Rivera, will be distilled and disseminated to all participating cities through the Knowledge Management and Learning process presented in Component 2. Besides, the project will implement a participative process to complete the Vulnerability and Risk Assessments and catalogue NbS options for the remaining cities of Trinidad, Young, Mercedes, Tacuarembó, and Paso de los Toros. This process is important to an innovative process from both a technical and educational perspective.

93. To support the roll-out, the Executing Entity (EE) will work hand in hand with ANII and procure experts and technical assistance in supporting city governments to develop proposals and access the funding mechanism. The EE will work with city governments to integrate innovative NbS and hybrid solutions into the city planning process. Technical assistance and mentoring are provided for in outputs 3.2.1., 2.1.2. and 1.2.2. The EE will first support the Durazno and Rivera city governments in the planning process and in developing grant proposals for financing with project funds the selected NbS alternative.

94. Technical assistance and mentoring will continue through the implementation phase supporting piloting of innovative adaptation NbS and hybrid Grey-green strategies (component 1). The project will involve academia testing and documenting of the experience, stakeholder consultation, and validate results as part of a feedback loop. The experience and evidence gathered will provide the information needed to scale financing and will provide valuable information on the relative success, or failure, of the piloted models, the capacity of the cities to implement and expand them, and on the level of effort needed to upscale the recommendations for urban resilience.

95. The EE with ANII and DINACC will oversee the monitoring and evaluation of the returns on investment, returns on capital, costs, human resources needed for recurrent maintenance etc. Technical functionality of the systems will be monitored continuously. This information will provide a feedback loop supporting adaptations, redesign, or scaling of the piloted systems based on the results. The level of acceptance of piloted systems and learning from failure is also an important part of the decision-making process. The pilot experiences will define the unforeseen variables, hidden costs, skills required in “typical” settings, and other valuable information that will be defined in the Monitoring and Evaluation system (outcome 1.2). The information garnered will be important in correctly assessing risks associated with the investments, which can only be obtained through “real” examples. A tested modality will demonstrate the financial and economic results needed to adapt the model and scale it through integration into urban development programs. Success in piloting NbS is a prerequisite for making the business case to public and private entities and to unlocking higher levels of funding for blended adaptation measures.

D. Describe how the project / programme would provide economic, social, and environmental benefits, with particular reference to the most vulnerable communities, and vulnerable groups within

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communities, including gender considerations. Describe how the project / programme would avoid or mitigate negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Adaptation Fund.

96. The project is designed to deliver economic, social, and environmental benefits to the communities in the Rio Negro Basin cities while ensuring compliance with the Environmental and Social Policy and Gender Policy of the Adaptation Fund.[8] The project adopts a comprehensive strategy to enhance resilience to climate change impacts through Nature-based Solutions (NbS) and an innovative financing mechanism.

97. The project will refine the identification of vulnerable groups across the five target cities during the formulation phase, using 2023 Census microdata and the additional Vulnerability and Risk Assessments to be developed for Young, Mercedes, Trinidad, Tacuarembó and Paso de los Toros, complementing the existing analyses for Durazno and Rivera. This process will enable a consistent characterization of priority groups such as low-income households, female-headed households, older persons, persons with disabilities, and households recurrently affected by flooding or with insecure tenure. Based on this information, the project will articulate the distribution of expected environmental, social, and economic benefits among these groups and will develop a monitoring approach integrated into the project's MEL system. The formulation phase will also define a dedicated indicator framework aligned with Adaptation Fund requirements, local monitoring capacities, and, where relevant, the principles of the Global Goal on Adaptation (GGA).

98. **Economic Benefits**: The project fosters economic opportunities by improving subnational and private sector capacity to invest in NbS. Under **Component 3**, the creation of innovative funding mechanisms (public transfers and competitive financial instruments) will enable cities to design and implement infrastructure projects with NbS integrated. This approach, once successfully demonstrated, will unlock investment from existing public sources, strengthen local economies, and encourage private sector participation in climate adaptation. Private sector interests in urban planning and contractors will benefit from business opportunities and acquire new skills. and Business-to-Business relationships facilitated through Component 3 through national and international linkages. These will foster new market opportunities and financial mobilization.

99. **Social Benefits**: The project aligns with the principle of Access and Equity in decision making and in distribution of benefits. Large scale events can have disproportionate impacts on vulnerable populations, such as marginalized and low-income communities, that reside in areas prone to flooding or in inadequate infrastructure. These vulnerabilities have been identified in the Vulnerability and Risk Assessments for Durazno and Rivera and have been further informed by the stakeholder mapping and the analysis of financing options carried out during the concept design. These elements will be expanded during formulation for the remaining cities, ensuring consistency with the project's vulnerability and social inclusion framework. The project, through the targeted investments, described in **Component 1**, will support resilience via bioretention zones, rain gardens, and urban tree planting, which improve living conditions by mitigating flood risks and enhancing public spaces. The project will incorporate gender considerations into its tender process and through a Gender Action Plan, to be developed during the PFG phase, measures for promoting equitable participation and access by men and women to the project's benefits in the form of business opportunities or results-based remuneration in installing NbS. Likewise, equitable access to training small and medium-sized businesses, especially women owned, to provide services to develop NbS. The project preparation phase will include a dialogue around innovative financing of NbS and hybrid technologies and will be complemented by an analysis of increasing social benefits through financing of risk abatement schemes, such as insurance products or public investment support to improvements in infrastructure.

[8] *https://www.adaptation-fund.org/wp-content/uploads/2013/11/Amended-March-2016_-OPG-ANNEX-3-Environmental-social-policy-March-2016.pdf*

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A Project Formulation grant will be important in defining all options with different layers of stakeholders, including the involvement of Academia to include the capture and distribution of social benefits as part of the Project's monitoring activities. Long-term benefits include improved community livelihoods, capacity building at subnational levels, and greater technical and economic empowerment for women and other vulnerable groups.

100. To ensure that the project effectively engages and benefits the identified vulnerable groups, the formulation phase will establish targeted outreach and accessible consultation processes that facilitate their meaningful involvement in planning and decision-making. These practices will guide the participatory selection and siting of NbS interventions, combining community knowledge with technical assessments in a manner consistent with approaches used in comparable initiatives. The project will also incorporate benefit-sharing criteria into the identification of sub-projects and adapt the grievance mechanism to ensure safe, confidential and equitable access for these groups. These elements will be reflected in the stakeholder engagement strategy, the Social and Environmental Safeguards, and the project's MEL framework.

101. To strengthen gender equity, the project aligns with the Gender and Climate Change Strategy of the SNRCC, the Gender and Climate Change Action Plan currently under development, and the gender analysis produced under the N4C initiative. These frameworks provide initial guidance on gender-differentiated needs and opportunities related to climate risks, urban services, and access to employment and financing. Building on this, the formulation phase will incorporate a gender-sensitive analysis within the Vulnerability and Risk Assessments for the five target cities, which will inform the full Gender Assessment and the Gender Action Plan to be developed with specific targets, indicators and a dedicated budget.

102. **Environmental Benefits**: These benefits are shaped by the specific climate vulnerabilities identified for each city, ensuring that NbS interventions respond directly to their local environmental pressures. The environmental benefits will be defined as the project's outcomes and outputs are finalized during the PFG process. Based on the ideas underpinning Outputs 2.1.4. and Outcomes 1.1 and 1.2, environmental benefits will be generated through the implementation of NbS. Among the potential alternatives defined for the cities of Durazno and Rivera include improved drainage, which would reduce the environmental effects of flooding. Controlled drainage reduces gully erosion, its associated soil erosion and sedimentation in watercourses. This would contribute to the protection of riverine ecosystems and avoid losses of CO2 sequestration potential. If nearby watershed protection measures are taken to reduce the impact of flooding, such as stream bank erosion or slope destabilization, a similar effect would be realized with an added benefit of ecosystem improvement in the areas under conservation or restoration, such as vegetated watercourses, bridge berms or culverts, or vegetated sediment traps and/or vegetated slopes. These, in combination with other urban tree plantings, could yield benefits such as temperature reduction, deep water absorption, or filtration of sediments. The implementation of bioretention zones, rain gardens, and tree planting in urban forests produces co-benefits to biodiversity in pockets of habitat which also mitigate pollution. Pollution prevention measures and resource efficiency will be achieved through sustainable water use, green infrastructure, and hybrid technologies.

103. **Mitigation of Negative Impacts**: The project will adhere to the Environmental and Social Policy by undertaking a screening of environmental and social risks during the PFG phase, classifying activities into appropriate categories to ensure potential impacts are assessed and mitigated. For Category A and B projects, environmental and social assessments (ESAs) will be conducted, and Environmental and Social Management Plans (ESMPs) will be developed to address risks. That process is linked to the Stakeholder Engagement and Consultation process (next section) and in the Monitoring and Reporting process (described below) which form a circular line of communication and feedback loops fundamental to identifying and mitigating potential negative impacts. Measures to avoid adverse impacts include:

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- Ensuring compliance with national and international laws and frameworks for environmental protection, water management, and local rural development.
- Preventing harm to natural habitats, ecosystems, and people through close monitoring during NbS implementation and restoration efforts.
- Upholding human rights and Free and Prior Informed Consent, ensuring no disproportionate impacts on vulnerable or marginalized groups, with targeted monitoring of gender considerations.
- Protecting public health by improving the living environment, reducing waterborne diseases, and addressing urban resilience to floods and droughts.

104. Mitigation of negative impacts will be integrated into the Environmental and Social Safeguards (ESS) and Stakeholder Engagement Plans, and other safeguard documents to be elaborated during the Project Formulation phase.

105. **Stakeholder Engagement and Consultation**: The project emphasizes inclusive participation and consultation processes with affected communities and stakeholders at every stage. Environmental and social risks, along with mitigation measures, will be disclosed publicly, ensuring transparency and effective engagement. To ensure adequate engagement throughout the project's development and execution and equal access to the project's opportunities and benefits, the PFG process will involve a full stakeholder mapping and analysis at each level as part of a comprehensive stakeholder engagement plan that defines the roles of each. The PFG phase will incorporate inputs and perspectives from the stakeholder groups identified into the design of the project activities and budget. The requisite Stakeholder Engagement Plans, Gender Mainstreaming Plans, Grievance Mechanism and budgets will be developed nationally and compliant with national protocols and collated at the regional level.

106. **Monitoring, Reporting, and Grievance Mechanism**: The project will avoid and/or mitigate negative impacts in compliance with the Monitoring, Evaluation, and Learning (MEL) system (Section III.D.) by integrating feedback loops into ANII's management and stakeholder engagement process. Feedback loops will enable checking, dialogue, and, if warranted, responses or mitigation. Monitoring and reporting will be integrated into the ESS, Stakeholder Engagement and Gender Plans that will be developed during the Project Formulation stage. Monitoring of these aspects will be integrated into the project review process with logging of reports of impacts and decisions.

107. Complaints and grievances will be handled through CND's Environmental and Social Grievance Mechanism (MRRAS) for projects/programmes financed by the Green Climate Fund and/or the Adaptation Fund (available at https://www.cnd.org.uy/institucional/denuncias-y-reclamos) and will be appropriately disclosed and disseminated to stakeholders in compliance with the Adaptation Fund's Environmental and Social Policy.

E. Describe or provide an analysis of the cost-effectiveness of the proposed project / programme and explain how the regional approach would support cost-effectiveness.

108. A refined analysis of the Cost-effectiveness of the proposed project will be undertaken during the project formulation stage for NbS selected for Durazno and Rivera and will be presented in the Full Project Document. A cost-effectiveness analysis will accompany each of the systems for targeted investment and alternatives considered and discussed.

109. The proposed process will seek to demonstrate the functionality and economic and financial terms for nature-based systems singularly or in hybrid combinations with funding for urban development infrastructure.

110. Preliminary studies indicate that Nature-based Solutions (NbS) tend to offer a more cost-effective approach than conventional grey infrastructure. While the latter typically involves high construction and maintenance costs, NbS have competitive initial installation costs, lower long-term operating expenses, and generate additional co-benefits such as improved biodiversity, urban temperature

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regulation, increased property values, and enhanced social well-being. For example, international analyses estimate that nature-based infrastructure can cost on average about 50% less than conventional solutions, while delivering equal or better results[9]. This combination allows for maximizing the return on investment not only in terms of climate risk reduction, but also in terms of ecosystem services and social benefits that extend far beyond the scope of a traditional project.

111. From the Nature4Cities project, progress was made in evaluating both the benefits and the costs of prioritized NbS in an integrated manner in the cities of Durazno and Rivera. For this, two assessment tools were used: Cost-Benefit Analysis (CBA) and Cost-Effectiveness Analysis (CEA), and a decision tree was formulated to structure a set of fundamental steps that allow for the evaluation of both costs and benefits, as well as their effectiveness based on the resources invested and the information available. To carry out both the Cost-Benefit Analysis (CBA) and the Cost-Effectiveness Analysis (CEA), it was essential to identify the costs involved in the development and implementation of NbS, which were grouped into different categories: capital costs, operational costs, and other associated costs. To get better results Nbs must be specifically defined, regarding site, design, dimensions, materials, alternatives, etc. The site location and design for the Nbs to be implemented at Mercedes, Paso de los Toros, Tacuarembó, Trinidad y Young will be carried out during the project implementing stage, and cost -effectiveness analysis will complement the information generated at that phase. In the case of Durazno and Rivera, refined cost-effectiveness analysis will be carried out in the full proposal. Even do, regarding CEA in the context of NbS, analyses conducted by Nature4cities conclude that CEA helps compare costs between options aimed at climate change adaptation, such as green and gray infrastructure, although its approach is limited to costs and does not consider the full monetization of benefits. One of its main strengths is its simplicity, since it does not require monetizing benefits, making it useful for analyzing specific impacts or impacts that are difficult to value economically. However, it presents significant limitations when evaluating NbS, given that these usually offer diverse and multifunctional benefits that are not always comparable to each other. Furthermore, CEA does not determine whether a project generates a positive net benefit without a broader analysis that includes monetization.

112. **Cost-Benefit Analysis of – Rain Garden:** For the city of Durazno, progress was made in conducting a non-specific location cost-benefit analysis for Urban Sustainable Drainage Systems (SUDS), specifically rain gardens. For the cost-benefit analysis, information provided by the Montevideo Municipality was used. The analysis exercise was performed for a Rain Garden with an area of 11 m², located on the street and connected to the urban drainage system. The analysis was conducted using values in Uruguayan pesos.

Item Detailed Cost	Cost in $	Cost in US$
Removal, replacement and earth movement rain garden	367,456	8,848
VAT (22%)	80,878	1,947
Labor (23.1%)	103,454	2,490
Social Laws (71.8%)	74,219	1,788
Contingencies (15%)	93,921	2,261
TOTAL	**720,000**	**17,333**

Table 6 Rain Garden Detail Cost.

113. For the analysis, costs were structured into the following subgroups:

[9] IISD (2021). Nature-Based Infrastructure: The Next Generation of Infrastructure. International Institute for Sustainable Development < https://nbi.iisd.org/wp-content/uploads/2022/12/nature-in-urban-infrastructure-planning.pdf>.

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Element 1: Costs related to removal, replacement, and earth movement in the intervention area, as well as rain garden construction costs.

Element 2: Labor costs along with corresponding social laws.

Element 3: Contingency costs, calculated as 15% of the total cost.

Element 4: Operational or maintenance costs for the rain garden, estimated as 5% annually of the total cost.

114. For the analysis, benefits were structured into the following subgroups:

Element 1: Reduction of flood costs per rain garden.

Element 2: Increase in property value due to the rain garden.

115. Summary Measures: Given the assumptions and limitations of the information obtained, detailed above, the economic-social evaluation of the cost-benefit analysis resulted in a Net Present Value (NPV) greater than zero (137,417) and an Internal Rate of Return (IRR) (10%) greater than the Discount Rate (7.5%). Thus, it can be concluded that the rain garden will improve resource allocation efficiency. That is, it will create a surplus representing a higher level of well-being through more efficient use of resources.

116. Sensitivity Analysis:

#	Scenario	Modified Variable	Detail	Results	
				TIRE	VANE
0	Original	n/a	n/a	10%	137.417
1	Reduction in Rain Garden maintenance costs	Maintenance cost	Reduced from 5% in the original scenario to 1%	18%	514.157
2	Reduction in the benefit generated by Rain Garden in increasing property value due to Rain Garden installation	Increase in property value due to Rain Garden	Reduced from 5% in the original scenario to 1%	8%	2.505
3	Reduction in Social Discount Rate	SDR	Reduced from 7.5% in the original scenario to 5%	10%	343.650
4	Reduction in the benefit generated by Rain Garden in reducing costs caused by floods	Reduction in flood costs due to Rain Garden	Reduced from 5% in the original scenario to 1%	-10%	-639.987

Table 7 Sensitive Analysis for Rain Garden.

117. **Cost-Benefit Analysis of – Urban Tree Planting:** For the city of Rivera, the analysis focused on NbS linked to urban green areas, particularly urban tree planting. The cost-benefit analysis used information from the General Directorate of Development and Environment of the Rivera Municipality and the consulting firm Dica & Asociados. The analysis was conducted using values in Uruguayan pesos.

118. Cost Estimation for Urban Tree Planting

Item	Unit	Quantity	Unit Price (USD)	Value (USD)
Sidewalk removal	m^2	1.5	21	32
Earthmoving (excavation up to 0.5m)	m^3	0.8	60	48
Addition of topsoil	m^3	0.8	37	30
Trees	Unit	1	11	11
Labor	Worker	0.17	-	4
VAT	-	-	-	24
Contingencies	%	20	-	24

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Total				**166**
Average pruning cost				**17**

Table 8 Urban Tree Detail Cost

119. For the analysis, costs were structured into the following subgroups:

Element 1: Costs related to the removal of the sidewalk and earthmoving in the intervention area.

Element 2: Costs related to topsoil to fill the hole and the tree sapling.

Element 3: Labor costs, including corresponding social charges.

Element 4: Contingency costs, calculated as 15% of the total cost.

Elements 5 and 6: Maintenance costs of the trees, corresponding to labor and fuel used in chainsaws.

120. For the analysis, the benefits were structured into the following subgroups:

Element 1: Increase in property values.

Element 2: Reduction in energy demand in homes.

Element 3: Reduction in flood damages.

121. Summary Measures**:** Under the assumptions and limitations of the information obtained, detailed above, the socio-economic evaluation of the cost-benefit analysis resulted in a Net Present Value (NPV) greater than zero (202,187) and an Internal Rate of Return (IRR) (69%) greater than the Discount Rate (7.5%). Thus, it can be concluded that urban tree planting will improve efficiency in resource allocation. That is, it will create a surplus that represents a higher level of well-being from a more efficient use of resources.

122. Sensitivity Analysis:

#	Scenario	Modified Variable	Detail	Results	
				TIRE	VANE
0	Original	n/a	n/a	69%	202.187
1	Without removal of the planted tree	Salvage value	The tree is not removed; it is assumed that its useful life is longer than the analysis period.	69%	205.521
2	The impact on energy savings is lower in homes due to the tree	Reduction in energy demand in homes.	It is reduced from 5% in the original scenario to 1%. .	63%	321.682
3	1.Reduction of the SDR 2.Increase in planting and maintenance costs	1. SDR 2. Removal of sidewalk and earth movement, tree and topsoil, unforeseen, pruning (labor), pruning (fuel).	1. It is reduced from 7.5% in the original scenario to 5%. 2. Costs increase by 20%.	63%	321.682
4	The planted tree is removed in 2045, and another is planted the following year:	All cost variables are modified. In the benefits, all except the property valuation.	The cost of tree removal is incorporated in 2045 (double the planting cost). The cost of tree planting is incorporated in 2046. Costs and benefits that depend on tree growth are modified.	69%	172.200

Table 9 Sensitive Analysis for Urban Tree.

F. Describe how the project / programme is consistent with national or sub-national sustainable development strategies, including, where appropriate, national or sub-national development plans, poverty reduction strategies, national communications, or national adaptation programs of action,

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or other relevant instruments, where they exist. If applicable, please refer to relevant regional plans and strategies where they exist.

Policy Framework on Climate Change at National and Local Levels

123. The proposed project aligns with Uruguay's national policies and plans to address climate change. Given its geographic location, population distribution, and primary economic activities, Uruguay is particularly vulnerable to climate change impacts. In response, the country has prioritized actions to enhance adaptive capacity and resilience across its productive systems and ecosystems. Uruguay ratified the United Nations Framework Convention on Climate Change (UNFCCC) through Law 16.517 in 1994. Since then, the country has made significant efforts in adaptation planning across various sectors, integrating cross-cutting themes. Notably, the development of National Adaptation Plans (NAPs) includes climate risk analyses and flood risk mapping to strengthen territorial planning. Additionally, the Gender and Climate Change Strategy and Plan promotes an inclusive approach by addressing diversity, human rights, and intergenerational equity. According to Uruguay's Sixth National Communication (2019-2023), the country has updated its Greenhouse Gas (GHG) Inventory for the 1990-2020 period, demonstrating its ongoing commitment to climate action. Furthermore, the First Biennial Transparency Report (BTR), submitted in December 2024, provides updated information on national circumstances, institutional arrangements, GHG inventories, progress towards Nationally Determined Contributions (NDCs), mitigation policies and measures, adaptation priorities, and needs related to financing, technology, and capacity-building.

124. Uruguay has also taken significant steps toward climate action and energy transition. By 2023, 92% of its electricity generation came from renewable sources, following an investment of over $8 billion in transitioning to a cleaner energy matrix. Additionally, the National Energy Efficiency Plan (2015-2024) aims to reduce energy consumption by 1,690 ktep compared to a baseline scenario. On adaptation, Uruguay has developed sector-specific adaptation plans to complement its broader climate strategy. The National Adaptation Plan for Agriculture (NAP-Agro), for example, outlines 66 adaptation measures and 32 indicators with a long-term horizon extending to 2050. These efforts are supported by institutional advancements such as the Long-Term Climate Strategy (ECLP), launched in 2021, which establishes a roadmap for low-emission development and climate resilience. Uruguay's Biennial Transparency Report (BTR) further highlights its commitments to improving adaptation, including initiatives in hydrological studies, ecosystem monitoring, and disaster risk reduction. Through these comprehensive efforts, Uruguay continues to position itself as a regional leader in climate adaptation and mitigation, demonstrating a strong commitment to integrating climate resilience into its national development strategy.

125. The National Climate Change Policy (PNCC) is the primary regulatory framework on climate change and resilience, which determines the strategic lines and actions to mitigate and adapt to the effects of climate change. These strategies and lines of action promote the capacity for adaptation and resilience of the population to climate change, variability and extreme weather and climate phenomena, with a focus on socially and climatically vulnerable groups. In addition, the policy promotes inclusion, improved quality of life, the development of cities, communities, human settlements and sustainable and resilient infrastructures that are adaptable to climate change and that promote the reduction of GHGs.

126. The PNCC is implemented through the Nationally Determined Contributions (NDC), which present Uruguay's commitments to mitigate and adapt to climate change. In the first NDC, Uruguay established the commitment to develop and implement 5 National Adaptation Plans. To date, 4 NAPs have been completed, including the National Agricultural Adaptation Plan, the National Coastal Adaptation Plan, the National Adaptation Plan for Energy, and the National Adaptation Plan for Cities and Infrastructure, which is the subject of this project. In addition, a National Policy for Integrated Risk Management of Emergencies and Disasters incorporates climate change considerations into some of its formulations. It seeks to coordinate its actions and monitoring mechanisms with

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frameworks, agreements, and guidelines for risk management, disaster reduction, and climate change adaptation. There are some other initiatives focused on the development and implementation of adaptation to climate change, for example: the Technology and modelling project for integrated water management as adaptation to climate change of the main source of drinking water in Uruguay, the Regional project between Uruguay and Argentina: Adaptation to Climate Change in Cities and Vulnerable Coastal Ecosystems of the Uruguay River; The national urban stormwater plan, the Nature4Cities project, the project: Identification of Adaptation Measures in cities: citizen participation as a driver of change and resilience and the Project: Urban actions for a sustainable recovery of cities in Uruguay.

127. Finally, the national policy framework is complemented by cross-cutting strategies such as the Gender and Climate Change Strategy, the REDD+ Program (aimed at mitigating climate change by creating positive incentives to prevent forest loss and degradation), the Sustainable Urban Mobility Promotion Project (focused on capacity building in urban mobility planning and laying the foundation for a national electric urban mobility program), and, as mentioned before, Nationally Determined Contributions (NDCs), aligned with the Paris Agreement, drive adaptation and mitigation efforts under the National Climate Change Policy, guiding strategic actions for resilience and sustainability. These contributions promote adaptation and mitigation efforts in Uruguay under the National Climate Change Policy.

128. Uruguay has national sectoral instruments linked to climate change and development illustrated as follows:

- **National Water Plan**: Establishes general guidelines for the integrated and sustainable management of water resources nationwide. It proposes specific objectives aligned with the National Water Policy and action lines for their implementation while laying the foundation for regional and local plans.
- **National Environmental Plan for Sustainable Development**: A strategic and adaptive instrument that identifies the country's main environmental challenges through participatory processes, guiding policies and actions for the coming years.
- **National Strategy for the Conservation and Sustainable Use of Uruguay's Biological Diversity**: Serves as the primary instrument for managing ecosystems, species, genetic resources, and the goods and services derived from them.
- **National Strategy for Sustainable Cities (ENCIS**): Promotes the greater inclusion of environmental and ecosystem dimensions in the planning of Uruguay's cities.
- **Territorial Planning and Sustainable Development Instruments**: Rooted in Law 18.308, these instruments define sustainable development strategies, land use, and management objectives based on social, economic, urban, and ecological goals, implemented through territorial planning.
- **National Policy for Comprehensive Emergency and Disaster Risk Management.**

129. The following Table No. 5 outlines the main strategies, policies, and plans on which this section of the analysis is based.

Instrument Name and Year	Summary of Objectives and Strategic lines	Relevance for urban areas
National Level		
Ley de ordenamiento territorial y desarrollo sostenible -LOTDS- Ley Nº 18.308 (2008) *(National Law on territorial planning and sustainable development Law 18.308)*	Regulatory framework for territorial planning and sustainable development of the country.	Determines the adoption of decisions and actions on the territory through environmentally sustainable planning, with social equity and territorial cohesion and establishes the recovery of the highest real estate values generated by land use planning.
Política Nacional de Cambio Climático (2017) *(National Policy for Climate Change)*	Its objective is to promote adaptation and mitigation in Uruguay in response to climate change. It contributes a global perspective to the country's sustainable development by ensuring intra- and intergenerational equity and upholding human rights. The goal is to foster a more resilient and less vulnerable society with greater	Among its strategic guidelines, it establishes the promotion of sustainable and resilient cities, communities, human settlements, and infrastructure in the face of climate change and variability, contributing to the reduction of greenhouse gas emissions. Its

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	adaptive capacity to climate change and variability, while being more aware and responsible in facing this challenge. It promotes a low-carbon economy through environmentally, socially, and economically sustainable production processes and services that incorporate knowledge and innovation.	strategic lines include enhancing the effective integration of climate change mitigation and adaptation into urban planning, territorial planning instruments, and landscape management. It also emphasizes the proper integration of climate change mitigation and adaptation, along with ecosystem services, into the design, construction, management, and maintenance of housing, infrastructure, facilities, and public service provision.
NDC1 (2020 - 2025) *(Nationally Determined Contributions 2020-2025)*	The NDC1 presents the main outlines of Uruguay's priorities, needs, plans, and measures for adapting to climate change's adverse effects. The NDC1 aims to enhance adaptive capacity, bolster resilience, and diminish climate change vulnerability, contributing to sustainable development and a suitable adaptation response. It encompasses 11 priority areas, including social concerns, health, disaster risk reduction, cities, infrastructure, territorial planning, biodiversity, ecosystems, coastal zones, water resources, agriculture, energy, tourism, and climate services.	Related Measures: By 2020, the National Adaptation Plan for Cities and Infrastructure was formulated, approved, and implementation began, including a focus on the right to the city, urban sustainability, and access to urban land. By 2020, a Guide for the Development of territorial planning Plans was implemented, which includes a component related to adaptation to climate change and variability. By 2025, adaptation measures will be promoted in at least 30% of cities with more than 5,000 inhabitants to address vulnerabilities and improve their adaptive capacities. By 2025, at least seven departments will have regional, departmental, or municipal plans for local adaptation to climate change and variability.
NDC2 (2025 - 2030) *(Nationally Determined Contributions 2025-2030)*	Uruguay considers climate change adaptation a national priority. Recent actions, driven by NDC1, national adaptation plans, and the Long-Term Climate Strategy (ECLP), confirm efforts to strengthen public policies and adaptation measures. The ECLP highlights key reasons for prioritizing adaptation: ● Increasing capacities for adaptation and resilience to reduce climate change risks and impacts. ● Assessing adaptation efforts and planning future actions aligned with national capabilities to strengthen climate action and risk reduction. ● Contributing to global governance that ensures political and financial parity between adaptation and mitigation, aligning national efforts with the Paris Agreement's Global Goal on Adaptation (GGA) and Global Stocktake.	It defines four secondary objectives and nine adaptation measures. The objectives are: Monitor and evaluate progress in the implementation of prioritized adaptation actions and goals for cities and territorial planning. Deepen the adequate incorporation of adaptation to climate change and variability into territorial planning, urban planning and management, urban landscapes, and building regulations under a climate risk framework, incorporating a nature-based solutions approach. Promote the generation of financing instruments for the implementation of adaptation actions that improve the resilience of cities to climate change and its effects. Promote the development of sustainable and resilient infrastructure in the face of climate variability and change that contribute to reducing greenhouse gas emissions.
Estrategia Climática de largo plazo Uruguay (2021) *(Uruguay's Long-Term Climate Strategy 2021)*	It seeks to project possible scenarios with consideration for future generations, reinforcing the various commitments undertaken by the country as part of the process of building and implementing a state policy on climate change. The Long-Term Climate Strategy (ECLP) aims to reflect Uruguay's "aspirational" long-term vision regarding climate change, encompassing adaptation, resilience, and greenhouse gas (GHG) emissions and removals. This strategy is intended to demonstrate how the country contributes to achieving the objectives of the Paris Agreement	It highlights as a national priority the need to increase adaptation and resilience to climate change and reduce its associated risks. In this regard, cities represent a particularly relevant area, as they concentrate the majority of the country's population (93.4% lives in urban areas). Cities also house the institutions, services, and infrastructure that represent the country's largest economic assets and key infrastructures.

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Plan nacional de adaptación en ciudades, 2021. *(National Adaptation Plan for Cities and Infrastructure 2021)*	The plan is presented as a strategy extending to 2050, with objectives derived from the action lines of the National Climate Change Policy and promotes the implementation of NbS as adaptation strategies. OE1: Deepen the effective integration of mitigation and adaptation to climate change and variability into urban planning, territorial planning instruments, and landscape management. OE2: Properly integrate mitigation, adaptation to climate change and variability, and ecosystem services into the design, construction, management, and maintenance of housing, infrastructure, facilities, and public service provision. OE3: Consolidate Integrated Disaster Risk Management through a prospective, corrective, and compensatory approach to recovery and decision-making that enables "building back better" and redirects planning processes to address pre-existing causes of risk. OE4: Strengthen capacities at the national, departmental, and municipal levels through the training of human resources and financing of actions, as appropriate to the budgetary competencies at each level of government, related to mitigation and adaptation to climate change and variability in cities, communities, and human settlements. It also OE5: Promote sustainable production and consumption practices by increasing resource use efficiency.	Its general objective is to reduce the vulnerability of communities to the effects of climate change and variability by building adaptation and resilience capacities in cities, infrastructure, and urban environments. This involves integrating adaptation measures into relevant policies, programs, and activities—both new and existing—as well as into national and local planning processes and strategies, with the aim of improving the population's quality of life. Nature-based Solutions are promoted as adaptation strategies.
Plan Nacional de Adaptación Costera (2021) *(National Adaptation Plan for Coast 2021)*	The Plan incorporates an adaptation perspective into the development and implementation of the coastal zone policy framework. It strengthens capacities at the national, departmental, and municipal levels related to climate risk management and adaptation in coastal ecosystems through human resource training and financing of specific actions, as appropriate to the budgetary responsibilities of each level of government. It also promotes the preservation of coastal spaces and natural processes threatened by climate change and variability.	Among the actions identified based on the characterization of climate risks are: Reduce the vulnerability of the built environment to rising sea levels. Protect critical infrastructure from the impacts of climate variability and change. Minimize economic losses attributable to the impacts of climate variability and change.
Sector Level		
Plan Nacional de Aguas *(National Water Plan)*	It establishes general guidelines for the integrated and sustainable management of water resources across the entire territory.	It emphasizes the need to link water management with land management, recognizing that all activities carried out on the land impact water resources, which in turn are connected to risk factors such as droughts and floods.
Plan Nacional Ambiental para el Desarrollo Sostenible *(National Environmental Plan for Sustainable Development)*	A strategic and adaptive instrument that identifies the main environmental challenges facing the country	Dimension 1.1: Guarantee the right of urban and rural populations to enjoy a healthy and balanced environment. With eight goals, among which 1.1.8 stands out, aimed at Sustainable Cities. This consists of integrating urban and environmental components, as well as all actions geared toward sustainable cities, into new local territorial plans and the review of existing ones. It also proposes urban development geared toward densification, consolidation, and utilization of infrastructure.
Estrategia Nacional para la Conservación y Uso Sostenible de la Diversidad Biológica del Uruguay 2016-2020. *(National Strategy for the Conservation and Sustainable Use of Biological Diversity in Uruguay)*	It establishes the national policy for the conservation and sustainable use of biological diversity, serving as the foundational instrument for the management of ecosystems, species, and genetic resources, as well as the goods and services derived from them.	Strategic line 2.2 establishes the need to strengthen the criteria associated with biological diversity in the Environmental Assessment and Territorial Planning processes.

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Estrategia Nacional de Ciudades Sostenibles— documento avance— *(National Strategy for Sustainable Cities)*	Its main objective is to achieve greater inclusion of sustainability in public policies, planning processes, and city management. This initiative will facilitate progress in implementing the New Urban Agenda, Uruguay's commitments made at the World Conference on Housing and Sustainable Urban Development (Habitat III, Quito, 2016), and the Sustainable Development Goals (SDGs).	Regarding green infrastructure and public spaces, it specifies that these elements incorporate vegetation into the urban fabric, enhancing environmental functions such as reducing temperature, capturing carbon, controlling floods, and mitigating noise, among others. Some of these functions are directly linked to adaptation processes for the effects of climate change and variability. Therefore, it highlights the importance of understanding the ecological functioning of the urban green system for proper planning and management, as well as identifying areas where land uses that strengthen ecosystems are prioritized.
Plan Nacional de Aguas Pluviales Urbanas para Uruguay (2023) Resolución Ministerial 1020/2023. *(National Urban Stormwater Plan for Uruguay -2023)*	The overarching objective of the Plan is to establish a strategy for managing rainwater runoff in all cities across the country. The goal is to provide a level of service that includes an adequate and reasonable standard of flood protection, minimizes the contribution of pollutants to urban watercourses, and promotes the integration, consolidation, and enhancement of water presence and the services it provides in cities. Its specific objectives are: O1: Reduce the risk of flooding from rainwater. O2: Increase knowledge and management levels of the physical assets and ecosystems that make up the water system in each city. O3: Build cities with greater resilience to face climate change scenarios. O4: Ensure that water and land management is carried out in an integrated and coordinated manner. O5: Contribute to improving the quality of public spaces associated with the presence of rainwater in cities. O6: Mitigate coastal erosion issues. O7: Provide tools for the sustainable management of watercourses. O8: Ensure the implementation of the National Plan for the Sustainable Use of Rainwater (PNAPU).	The plan identifies the following contributions: A hybrid approach (Grey + Green) for mitigating water risk, incorporating co-benefit analysis and adaptability to climate change. Estimation of the water infrastructure gap at the national level for a range of scenarios, including urban prospecting, climate change, and the implementation of Nature-based Solutions (NbS). Territorial management focused on resolving specific conflicts through community agreements that promote the integration of NbS with high-quality spaces for the population, among other frameworks.
Plan de Aguas pluviales urbanas de la ciudad de Rivera. −unpublished document−	The Rivera Urban Rainwater Plan has the overarching objective of developing a short-, medium-, and long-term strategy for effective and efficient rainwater management. This strategy considers climate change adaptation and mitigation while promoting sustainable solutions that harmonize with the city's physical and natural assets. O1: Reduce the risk of urban flooding from fluvial sources caused by the overflow of the Cuñapirú Stream and its main tributaries. O2: Protect the population from rainwater flooding and improve mobility during rainy periods. O3: Maximize the lifespan and ensure proper functioning, as per their design and planning, of rainwater drainage assets. O4: Contribute to the preservation and improvement of urban and natural heritage, as well as to climate change mitigation and adaptation.	● It provides a characterization that considers climate change scenarios. Within its strategies, it proposes sustainable drainage solutions (SuDS), formalized through a Nature-based Solutions (NbS) approach

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Planes locales de ordenamiento territorial y desarrollo sostenible. *(Local plans for territorial planning and sustainable development.)*	Frameworked within Law 18,308 (LOTDS), they are the local territorial planning instruments (IOTs). Their scope includes land categorization and zoning, as well as specific urban planning implications. They are locally drafted, taking into account the constitutional jurisdiction of departmental governments in this scope. The LOTDS establishes that IOTs will implement environmentally sustainable regulations, assuming environmental conservation as a priority objective, encompassing natural resources and biodiversity, adopting solutions that guarantee sustainability, and procedurally regulates the implementation of strategic environmental assessments and mandatory social participation within the IOT development processes.	Exclusive local powers regarding land planning and categorization are an advantage when integrating local adaptation processes, particularly considering that the proposal for the development of adaptation plans with a focus on NBS is structured around a local working group. Territorial planning and sustainable development instruments are considered the most appropriate instruments for incorporating adaptation measures that guide sustainable and resilient urban development. Additionally, the framework law on territorial planning and sustainable development deploys a set of management tools linked to financing mechanisms in land access strategies, use restrictions, protection and conservation measures integrated with compensation strategies, transfer of rights, and value capture. These have been identified as tools for implementation in NBS, provided that this strategy is integrated as a planning instrument.

Table 7 Main Referenced Instruments, Policies, Strategies, and Plans.

G. Describe how the project / programme meets relevant national technical standards, where applicable, such as standards for environmental assessment, building codes, etc., and complies with the Environmental and Social Policy of the Adaptation Fund.

130. The investments in creating a fund, private sector engagement, and Knowledge Management and Learning are not subject to national standards. Activities in completing the Vulnerability and Risk Assessments will follow the same protocols as the previous cases in the cities of Rivera and Durazno, where the studies were undertaken by the N4C project in adherence with the Adaptation Fund's Environmental and Social Policy. As NbS are defined and selected for funding, an ESS screening will form part of the selection process. That screening will signal the types of safeguards triggered and the corresponding documentation for each safeguard per Adaptation Fund Policy and Uruguayan Policy and Norms.

131. Preliminary applicable standards and clearances for the proposed NbS typologies has been identified in the following table. The integration of standards and clearances for prioritized NbS will be integrated into a sub-project eligibility mechanism during the fully developed proposal stage.

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	Nbs	Types	Planning Phase - Site Selection / NbS Design	Authority	Construction Phase / Permits
Blue Green Infrastructure (BGI)	Urban Forestation: Refers to urban parks integrated into regional networks	Phytoremediation forests Ecological-forest corridors Agroforestry	Land Management Local Plans: compatibility with land categories and zonning, integration with green areas planning, urban public space design parameters. (This will have to be revised for the specific standars for each city) Urban Tree Plan: integration and prioratization of sites. National Biodiversity strategy guidelines.	Local Government: Departments of Architecture and Land Management. (Territorial Planning), Environment.	Registration of works for social security contributions for workers (Social Security Office) Safety plan authorization (Ministry of Labor) Urban forestry recommended species (National Directorate of Biodiversity and Ecosystem Services - Minsitry of Environment) Solid waste disposal plan (Local Government) Possible environmental impact studies (Ministry of Environment)
	Green Spaces:	Pocket parks Natural parks Residential gardens Squares			
	Green corridors: Corridors integrated into the city's green area system	Micro corridors: streets, avenues, trees on properties. Macro corridors: streets, avenues, boulevards.			
	Building solutions: Green surfaces, water capture, reuse and storage devices, temperature control systems, air conditioning, food production elements	Extensive Green Roofs Intensive green roofs (gardens, orchards, etc.) Green façades from substrates in the ground Green facades with roots, built-in substrates and irrigation systems.	Land Management Local Plans: compatibility with land categories and zonning, aplication of parameters for regulated areas (land occupation factors, total occupation factors, building heights, etc.) National Housing Hygene codes: Insulation, natural lighting and ventilation parameters, santita.tion and plumbing specifications Building codes: materials standars, sanitation and plumbing specifications. (This will have to be revised for the specific standars for each city)	Local Government: Departments of Architecture and Land Management. (Territorial Planning), Buildings regulations- Housing.	Construction Licenses (Local Government), Registration of works for social security contributions for workers (Social Security Office) Safety plan authorization (Ministry of Labor) Solid waste disposal plan (Local Government) Possible environmental impact studies (Ministry of Environment)
	Renaturation of rivers and streams	Renaturation of edges and background Stream detubing Bioengineering techniques Riparian Restoration	Land Management Local Plans: compatibility with land categories and zonning, integration with green-blue areas planning. (This will have to be revised for the specific standars for each city) National Biodiversity strategy guidelines	Local Government: Departments of Architecture and Land Management. (Territorial Planning), Public Works.	Registration of works for social security contributions for workers (Social Security Office) Safety plan authorization (Ministry of Labor) Solid waste disposal plan (Local Government) Urban forestry recommended species (National Directorate of Biodiversity and Ecosystem Services - Minsitry of Environment) Possible environmental impact studies (National Directorate of Environmental Impact -Ministry of Environment)
Water-Sensitive Urban Design (WSUD)	Sustainable Drainage Systems: Typically, shallow areas of vegetative depressions capable of intercepting, infiltrating, shunting, modifying flows and velocity in the treatment of storm drain flows.	Natural bead-trenches Rain Gardens Flood tree pits Permeable/Green Surfaces Buffer Gaps Retention gaps Bio-Retention Areas Rainwater Harvesting Systems	Land Management Local Plans: compatibility with land categories and zonning, integration with green-blue areas planning. (This will have to be revised for the specific standars for each city) Building codes: materials standars, sanitation and plumbing specifications. (This will have to be revised for the specific standars for each city) National Codes: Urban drainage/stormwater guides	Local Government: Departments of Architecture and Land Management. (Territorial Planning), Public Works.	Construction Licenses (Local Government), Registration of works for social security contributions for workers (Social Security Office) Safety plan authorization (Ministry of Labor) Urban drainage/sotrmwater codes (National Directorate of Waters-Ministry of Enviroment) Solid waste disposal plan (Local Government) Possible environmental impact studies (National Directorate of Environmental Impact -Ministry of Environment)
	Constructed wetlands: Similar to natural wetlands in appearance, they are built as parts of the engineering system of water infrastructures to use natural processes in wastewater treatment, carbon sequestration and adaptation.	Free runoff surfaces, Groundwater Flow Wetlands		Local Government: Departments of Architecture and Land Management. (Territorial Planning), Public Works, Environment.	Registration of works for social security contributions for workers (Social Security Office) Safety plan authorization (Ministry of Labor) Urban drainage/sotrmwater codes (National Directorate of Waters-Ministry of Enviroment) Solid waste disposal plan (Local Government) Possible environmental impact studies (National Directorate of Environmental Impact -Ministry of Environment)
	Floodplains: Refer to the recovery, restoration, conservation of flood plains (room for the river)	Recognition, restoration and/or conservation of riparian ecosystems			

Table 8 Preliminary Standards -Codes applicable to NbS Construction.

H. Describe if there is duplication of project / programme with other funding sources, if any.

132. The proposal to the Innovation window of the Adaptation Fund is a result from the Nature4Cities initiative and does not duplicate activities funded by other sources. The innovative elements and follow-on activities, such as vulnerability studies for remaining cities in the Rio Negro Watershed, represent complementary and sequential efforts that build upon the initiative's existing body of work.

133. During the development of the NAP Cities and Infrastructure, the adaptation group for cities was formed, which today is integrated into the working groups of the National Climate Change Response

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System. This working group established the national-level technical monitoring committee during the development of Nature4Cities and is the group that drives the monitoring and fulfillment of the measures projected in NAP Cities and Infrastructure. This project foresees that the same group will assume the same role regarding technical oversight and monitoring of alignments and synergies with national strategies, regulations, and sectoral planning. Its technical integration, with representation from various national directorates, seeks to ensure synergy and complementarity with other strategic and planning initiatives, especially those related to the Rio Negro basin and Nature-based Solutions (NbS) at the sectoral level, as structural components within a joint technical committee. In this sense, this project is built mainly from the lessons learned and recommendations of the Nature4Cities project. Based on its results, it helps strengthen the implementation of measures and the effective achievement of the operational plan goals of the National Adaptation Plan for Cities and Infrastructure, such as boosting climate risk reduction in sectoral planning, advancing climate change response at the local level, improving urban environments, enhancing the role of vegetation, public spaces, and city infrastructure. It creates significant synergy for the proposed measures to be implemented and the incorporation of NbS in the sustainable urban drainage systems proposed by the National Urban Stormwater Plan for Uruguay. The NbS prioritized in the cities will share the standards proposed in this plan. Additionally, the national territorial planning program for the Rio Negro basin, currently in the process of approval, considers strategic lines regarding environmental management, actions aimed at adopting climate change adaptation measures, as well as in habitat and housing, promoting resilient cities, NbS, energy efficiency, and comprehensive urban projects. Once the NbS pilots are implemented, reporting protocols will be established to inform the various strategic and planning instruments regarding the fulfillment of measures and goals

I. Describe the learning and knowledge management component to capture and disseminate lessons learned.

134. The learning and knowledge management aspect of the project is structured to increase the stakeholders' capacity to execute NbS, ensure effective documentation, dissemination, and practical application of lessons learned at every stage of project implementation. A Knowledge Management and Learning (KML) is included in Component 3 which supports the following KML aspects:

135. The component supports capacity building and knowledge transfer by integrating learning into project activities, fostering innovation, and engaging stakeholders across public and private sectors. The key elements and their relationships under each project component are as follows:

136. **Component 1** focuses on increasing resilience to the effects of climate change, combining practical learning with strategic knowledge management. The Vulnerability and Risk Assessments conducted for 5 additional cities serve as a critical foundation, providing essential knowledge for implementing local climate adaptation measures. Piloting NbS and green-grey technologies generates real-world data on technical functionality, cost efficiency, and the human resources required for maintenance. These pilots are supported by robust Monitoring, Evaluation, and Learning (MEL) systems that capture unforeseen challenges, hidden costs, and the skills needed to sustain the interventions, ensuring that adaptation measures are continuously refined and improved. In addition, the establishment of this MEL will help strengthen the adaptation MEL at the national level.

137. The knowledge management approach in this component emphasizes creating a dynamic feedback loop. Piloted systems are closely monitored, enabling the adaptation or redesign of measures based on their performance. This iterative process allows the project to scale successful solutions while discarding those that prove ineffective. Lessons learned from both successes and failures are systematically documented, offering valuable insights to guide future investments and foster effective public-private partnerships. This comprehensive strategy ensures that the knowledge generated through Component 1 not only supports project implementation but also builds a strong foundation for long-term resilience and innovation.

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138. **Component 2** focuses on building the technical capacity to select NbS from the existing catalogue, adapt them to local context and design potential alternative and innovative NbS, integrating targeted learning and robust knowledge management strategies. Training programs equip small and medium-sized businesses with expertise in innovative NbS practices, such as implementing green roofs, permeable pavements, and other sustainable solutions. Expert-in-residence programs embed international expertise directly within subnational governments, fostering hands-on capacity building and ensuring the retention of knowledge for long-term application. Furthermore, the creation of knowledge products synthesizes key insights from piloted innovations, facilitating their dissemination to a wider audience. This dissemination can be supported by staff from the subnational institutions that have received the in-residence program as a way to ensure the dissemination of lessons learned.

139. Knowledge management within this component emphasizes collaboration and cross-border learning. Business-to-business exchanges and active private sector engagement foster innovation sharing and build networks to support NbS implementation. Additionally, technical assistance programs, both through 2.1.2 and 2.1.3 will provide tailored support for project proposal preparation ensure effective knowledge transfer, empowering stakeholders to design and implement resilient urban development strategies. This integrated approach ensures that the knowledge generated and shared through Component 2 has a transformative impact on the adoption and scaling of NbS and hybrid technologies.

140. **Component 3** focuses on creating an enabling environment for increased investment in urban resilience, emphasizing both learning and knowledge management. The development and testing of an innovative financing mechanism serve as a cornerstone, with the results carefully documented to support scaling within existing government programs. Private sector stakeholders are actively engaged through business-to-business exchanges and a comprehensive Private Sector Engagement Plan. These efforts aim to foster capacity for adopting and implementing climate adaptation technologies, promoting collaboration and innovation.

141. The project's funding mechanism is designed to capture critical lessons on financing green-grey infrastructure and the adoption of NbS. This process generates a compelling business case for scaling blended adaptation investments. Data and experiences collected throughout implementation will provide valuable insights to inform public officials, helping to reduce risk and encourage the integration of NbS into urban planning processes. By combining practical application with strategic knowledge management, Component 3 establishes a robust foundation for urban resilience.

Capture and Dissemination of Lessons Learned

142. The project integrates a comprehensive learning transfer model that combines "learning by doing," through hands-on implementation of NbS pilots, with "learning by seeing," facilitated by business exchanges, seminars, and expert-led training. Lessons learned will be captured and disseminated through a variety of mechanisms to ensure their application and accessibility.

143. Documentation of project implementation will play a central role, with all activities monitored and evaluated for their technical, financial, and operational outcomes. Vulnerability studies for 7 cities will provide accessible and actionable insights on NbS prioritization and climate risks, offering a solid knowledge base for decision-making. Feedback loops will be established to analyze pilot results, enabling iterative improvements to refine future interventions. Failures will be documented and studied to identify risks and challenges, ensuring that lessons learned contribute to broader learning opportunities.

144. Knowledge sharing will be facilitated through platforms like the Adaptation Fund Community of Practice, which will disseminate findings, best practices, and innovations to stakeholders and regions. The project also emphasizes stakeholder engagement and capacity building, prioritizing awareness-raising among municipal decision-makers and private sector stakeholders about the benefits of NbS and associated funding mechanisms. Training and expert support will ensure that technical

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knowledge and financial planning skills are both developed and retained locally. Finally, a closeout seminar will present project results and lessons learned, ensuring that insights are communicated to stakeholders, are integrated into policy and funding frameworks and into the national level MEL.

J. Describe the consultative process, including the list of stakeholders consulted, undertaken during project / programme preparation, with particular reference to vulnerable groups, including gender considerations, in compliance with the Environmental and Social Policy of the Adaptation Fund.

145. This project concept is the product of a consultative process grounded in the findings and products generated through the Nature4Cities (N4C) initiative, which provided foundational assessments, risk analyses, and baseline data that inform the need for an innovative process to promote adaptation in the local socio-economic conditions in the Rio Negro watershed. The development of an innovation concept note evolved from the N4C consultative process in the following areas:

146. Climate Risk Analysis and Academic Linkages: As part of the comprehensive Vulnerability and Climate Risk Assessments for the cities of Durazno and Rivera, the Institute of Environmental Hydraulics of Cantabria (IH Cantabria), provided a rigorous foundation for the project's risk management strategy. Updated risk maps were generated for each identified threat, specifically flooding and extreme temperatures, offering technical support for decision-making and urban resilience planning.

147. Consultation and Validation with Local Stakeholders: The project concept was informed through a consultative process involving local knowledge, institutional priorities, and multi-sectoral collaboration. Key stakeholders, including municipal governments, local institutions, communities, and the private sector, which identified and prioritized the proposed Nature-Based Solutions (NbS). A project formulation process is requested to scale the N4C's initial findings beyond Durazno and Rivera into other cities in the Río Negro Basin. Continued stakeholder coordination during the project formulation phase will ensure local ownership of the proposed solutions.

148. Financing Mechanisms and Scalability: Recognizing the need for sustainable financing, the project concept includes innovative financing proposals that will enable scaling based on the results of NbS implementation. To enhance municipal participation, the project concept includes a funding window that will enable municipal governments to access project funding through a competitive process to pilot NbS. This strategy builds on the financial structures initially explored under N4C project and will be further developed during the project formulation process within the context of the cities within the Río Negro Basin.

149. In addition to the recent and extensive stakeholder coordination by the N4C project, this Concept Note was developed with supervision of DINACC and in coordination with the Cities Adaptation Group in the following additional activities:

150. Consultation Workshop – October 23, 2024: A consultation workshop was held with the Urban Adaptation Group. This group functions as a technical working body within the framework of the National System for Climate Change Response, integrating various national directorates, divisions, and agencies from the Ministries of Environment and Housing & Territorial Planning. Originally established as a technical committee for the development of the National Adaptation Plan for Cities and Infrastructure (NAP Cities), the group has since been responsible for identifying and monitoring a range of capacity-building initiatives and the implementation of adaptation proposals for urban areas. It is tasked with monitoring and evaluating the progress of NAP Cities and serves as the conduit for reporting compliance with adaptation measures under the Nationally Determined Contributions (NDC). Its membership comprises the Ministry of Environment (National Directorate of Climate Change—coordinator, National Directorate of Water, National Directorate of Biodiversity and Ecosystem Services, National Directorate of Environmental Quality and Evaluation), the Ministry of Housing and Territorial Planning (National Directorate of Territorial Planning, National Directorate of Housing, National Directorate of Social and Urban Integration), and representatives from the

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Congress of Mayors. At the workshop participated 13 representatives, including 10 female participants and 3 male participants.

151. During this session, discussions focused on integrating NbS into national and local urban planning frameworks. Key topics included the institutional requirements for project implementation and expanding the project's scope to include all cities with populations over 10,000 in the Río Negro Basin. A proposal was made to convene an extraordinary session of the National Climate Change Response System to explore these themes further.

152. Uruguay River Basin Coordination Committee Workshop – November 13, 2024: A second workshop was held with the Uruguay River Basin Coordination Committee (*Consejo Regional Cuenca Río Uruguay*), focusing on institutional and financial aspects of NbS implementation. Discussions covered:

- Funding mechanisms under the Adaptation Fund's Innovation Facility.
- Institutional strengthening for long-term climate adaptation.
- Integration of NbS into existing policy frameworks.
- Policy incentives to encourage NbS adoption.
- Challenges and opportunities for implementing NbS at scale.
- Blending green and gray infrastructure to optimize urban resilience.

153. The Uruguay River Basin Coordination Committee is composed in a tripartite and equitable manner by: 7 government delegates, 7 user delegates, and delegates from civil society. It is chaired by the National Director of Water (DINAGUA) of the Ministry of Environment, with the vice-chair held by the Ministry of Livestock, Agriculture, and Fisheries. The workshop was attended by 40 representatives from the following institutions, including 18 female participants and 22 male participants. The participating institutions were: Ministry of Environment (National Directorate of Water, National Directorate of Climate Change, National Directorate of Environmental Control, General Directorate of Services), Ministry of Housing and Territorial Planning (National Directorate of Territorial Planning), Ministry of Industry, Energy and Mining, Ministry of Livestock, Agriculture and Fisheries (General Directorate of Natural Resources), Ministry of Foreign Affairs, Energy National Enterprise - UTE, Water and Sewer National Enterprise - OSE, Subnational Government of Artigas, Subnational Government of Cerro Largo, Subnational Government of Flores, Subnational Government of Florida, Subnational Government of Tacuarembó, University of the Republic of Uruguay - School of Agronomy, Association of Agronomy Engineers and the Departmental Emergency CommitteeNature4Cities local groups for Durazno and Rivera – November 14, 2024 workshops in Durazno, November 15, 2024 workshops in Rivera. The purpose of the meetings was to work with each NbS Task group the Concept Note proposal and to validate the NbS identified and integrated in the Nature urban adaptation plans. The key meetings covered the potential of the NbS proposed trough a methodological proposal the measures were described, discussed and prioritized, the financial mechanism for their implementation, and the timeline of the funding mechanisms.

154. The NbS Task groups were composed of representatives from various local institutions, accompanied by representatives from national institutions. At the local level in Durazno, the members included representatives from the Durazno Subnational Government (General Directorate of Public Works, General Directorate of Development, Department of Social Promotion), Durazno Departmental Council, National Emergency System, Emergency Coordination Center, Departmental State Sanitary Works (OSE), National Administration of Power Plants and Electrical Transmissions (UTE), and the Technological University of Uruguay (UTEC). At the local level in Rivera, the members included representatives from the Rivera Subnational Government (General Directorate of Public Works, General Directorate of Development, Department of Promotion and Social Action), Rivera Departmental Council, National Emergency System, Departmental Emergency Coordination Center, State Sanitary Works (OSE), National Administration of Power Plants and Electrical Transmissions (UTE), and the University of the Republic of Uruguay (UDELAR). At the national level, the members included representatives from the Ministry of Environment (National Directorate of Climate Change,

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National Directorate of Water, National Directorate of Biodiversity and Ecosystem Services), and the Ministry of Housing and Territorial Planning (National Directorate of Territorial Planning and National Directorate of Housing).

155. At the November workshop in Durazno, attendance included 23 representatives, with 13 female participants and 10 male participants. In Rivera, attendance included 22 representatives, with 8 female participants and 14 male participants. Final Consultation with the National Climate Change Response System – December 10, 2024: The final consultation session with the National Climate Change Response System validated the project portfolio and refined the Concept Note. This meeting sought to align project objectives with national adaptation policies, securing the commitment of government institutions, municipalities, and civil society.

156. The National System for Response to Climate Change and Variability was created to coordinate and plan the public and private actions necessary for risk prevention, mitigation, and adaptation to climate change. It consists of a system coordination group, which includes public and private representatives from various ministries, the Congress of Mayors (departmental governments), and is complemented by an advisory commission made up of technical representatives from different academic, technical, or research entities, convened by the coordination group. The institutions currently participating are: the Ministry of Environment, the Ministry of Livestock, Agriculture and Fisheries, the Office of Planning and Budget, the Ministry of Transport and Public Works, the Ministry of Education and Culture, the National Meteorology Institute, the Uruguayan Association for International Cooperation, the Ministry of Social Development, the Ministry of Housing and Territorial Planning, the Ministry of Economy and Finance, the Ministry of National Defense, the Ministry of Tourism, the Ministry of Public Health, the Ministry of Foreign Affairs, the Ministry of Industry, Energy and Mining, the National Emergency System, and the Congress of Mayors. At December session the attendance included 21 representatives, with 15 female participants and 6 male participants.

157. In addition, the consultation process also included bilateral meetings with strategic partners. The National Development Commission (CND) and the Office of Planning and Budget (OPP) provided insights on urban resilience policies and financing mechanisms. Academia was consulted through the Center for Sustainability (Adapt@FADU), an adaptation initiative led by the School of Architecture, Design, and Urbanism (FADU), which contributed an essential academic perspective, ensuring the integration of NbS into urban adaptation planning. Additionally, ANDE (Agencia Nacional de Desarrollo), a funding entity that supports sustainable urban initiatives, was engaged to explore financing opportunities for NbS implementation.

158. Stakeholders expressed a limited understanding of Nature-based Solutions (NbS), highlighting the need for greater awareness and capacity-building. Concerns were also raised regarding the lack of sufficient evidence to demonstrate the effectiveness of NbS as a climate adaptation strategy, which has made it difficult to secure broader institutional and financial support. Additionally, misalignment between national and local government strategies emerged as a significant challenge, hindering the seamless integration of NbS into urban planning and policy frameworks. Finally, stakeholders identified difficulties in incorporating innovative financing mechanisms and adapting institutional frameworks to support the long-term implementation of NbS at scale.

K. Describe how the project/programme draws on multiple perspectives on innovation from e.g., communities that are vulnerable to climate change, research organizations, or other partners in the innovation space, in the context in which the project/programme would take place.

159. The project exemplifies a systems-thinking approach by synthesizing community input, scientific research, and institutional frameworks to create innovative, adaptable solutions tailored to Uruguay's climate resilience needs. It builds bridges between local knowledge and global expertise, ensuring that transformative practices not only address immediate challenges but also lay the groundwork for sustainable development. The project leverages a multi-perspective approach to innovation by

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drawing insights and expertise from diverse stakeholders, including vulnerable communities, research organizations, institutional partners, and the private sector, building on the experiences of the Nature4Cities initiative in other countries where it has been successfully implemented[10]. These perspectives are seamlessly integrated to foster innovative strategies that are both locally grounded and scalable for broader application.

160. The program's foundation lies in understanding localized climate impacts through vulnerability and risk assessments. These assessments address specific risks like flooding and heatwaves identifying targeted solutions tailored to each community's unique needs. By actively involving communities in these processes, the project ensures that local voices and experiences directly shape the design of NbS interventions. Research organizations contribute significantly to the project's scientific and technical base. The program employs cost-benefit and cost-effectiveness analyses to prioritize adaptation investments while evaluating the environmental and social impacts of hybrid (green-grey) infrastructure. These methodologies ensure that interventions are feasible, effective and adaptable for replication in other cities. Furthermore, the use of standardized risk assessment tools underpins the design and implementation of NbS, reinforcing their credibility and scalability. Research organizations also play a crucial role in monitoring pilot projects, providing evidence-based insights to refine solutions and scale successes.

161. Institutional stakeholders, including the Cities Adaptation Group, play a key role in providing technical and regulatory oversight for the components designed within the project. The implementation structure is expected to involve ANII´s instruments and CND, ensuring effective execution. Additionally, the private sector is actively engaged to accelerate innovation and scalability, fostering business-to-business exchanges and partnerships that enable the adoption of advanced technologies—such as green roofs, bioretention gardens, and sustainable materials. These solutions are co-designed with private entities to ensure their economic and practical viability while aligning with territorial planning instruments and regulatory frameworks that guide sustainable urban development. These collaborations highlight how market-driven innovation complements public policy goals to achieve shared outcomes in climate adaptation.

162. Capacity building is central to the project's approach, blending "learning by doing" through practical NbS pilot implementations with "learning by seeing" through expert-led seminars, business exchanges, and training programs. Platforms like the Adaptation Fund Community of Practice foster cross-sectoral and cross-regional learning, enabling stakeholders to share best practices, lessons, and results.

163. The project pioneers the integration of NbS into urban planning in the Rio Negro Basin, where these approaches have previously been limited. By establishing technical and financial frameworks, the program facilitates the mainstreaming of NbS into public policies and urban development strategies. Piloting innovative financing models, such as blended finance mechanisms, addresses barriers to NbS adoption by reducing perceived risks and fostering buy-in from both institutional and private-sector stakeholders. These efforts lay the groundwork for a transformational shift in how urban areas approach climate resilience, ensuring that NbS becomes a central component of future planning and investment.

L. Provide justification for funding requested, focusing on the full cost of adaptation reasoning.

[10] *https://cityadapt.com/en/nature4cities/*

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164. The project will demonstrate NbS and/or hybrid solutions in small and medium sized Uruguayan cities where these are relatively unknown and untested. Consequently, these are not objects for investment. The project baseline developed by the Nature4Cities project analyzed the potential for NbS and financing needs for 2 cities: Rivera and Durazno. For each, a suite of analysis and knowledge products were produced. Many of these materialized late in the project cycle. As a result, NbS solutions are identified for 2 of the target cities and untested throughout the Rio Negro territory. The project is innovative in this territory and with the stakeholder groups. The project will test NbS solutions and financial modalities for the public and private sectors. Based on the results obtained, the adaptation or redesign may be necessary. For this reason, third-party monitoring and analysis of technical, social, economic and financial results with the involvement of academic institutions is provided for in the project design. Likewise, the funding or financing of green and green-grey alternatives has not been demonstrated in neither the public sector nor the private sector.

165. Under the full cost of adaptation reasoning, the Innovation Project finances only those activities that are strictly required to enable climate adaptation results in cities where NbS are not yet validated. Without the requested resources, municipalities and local actors would not have the technical, financial, or institutional conditions to identify, test, and evaluate NbS or their hybrid alternatives. The project therefore covers the incremental adaptation needs—vulnerability and risk analyses, testing of technical and financial models, pilot demonstrations, and independent monitoring—that cannot be delivered through existing public budgeting or conventional investment processes.

166. The Adaptation Fund grant will be administered by CND as the Implementing Entity and transferred to a national Executing Entity, to be designated during the formulation of the full proposal, which will operate in coordination with subnational governments. Resources will be directed to: (i) specialized firms and national institutions responsible for climate-risk analyses and technical designs; (ii) municipal governments for the execution of small-scale nature-based interventions and community engagement activities; and (iii) national or local institutions for capacity-building and the development of risk-informed planning and information tools. Each expenditure directly contributes to the project's adaptation objectives and supports the reduction of climate-related risks in the target cities.

167. Therefore, financing NbS is beyond the risk tolerance for public and private institutions. The uncertainty associated with demonstrating the performance, costs and long-term returns of NbS—particularly in cities where these approaches remain untested—limits their ability to mobilize resources without external support. An innovation project capable of assuming this moderate level of uncertainty is required to generate the evidence base needed for future public and private investment.

M. Describe how the sustainability of the project / programme outcomes has been taken into account when designing the project / programme.

168. The inclusion of the private sector and exposing local businesses to new technology and business opportunities is intended to stimulate new interest and business opportunities in selling and installing technologies, such as green roofing, and provide for the long-term provision of services in NbS. These opportunities could expand the use of NbS independently of the public sector. It is difficult to gauge the sustainability of an innovation project, which, by definition, is a process that requires testing of technology, financing, and capabilities. Inherent to this process is the risk of failure, which would trigger a redesign, adaptation, or abandonment with testing of other NbS alternatives or ideas that respond to the factors causing failure or under-performance. As mentioned in Section L, the project will have third party evaluation, stakeholder dialogue, and analysis of results to support an analytical process. The project's components, which will be further examined during a project formulation process, were chosen for both the technical and financial dimensions required for a sustainable outcome. Evidence demonstrating successful implementation of NbS and the performance of cities

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and local stakeholders in executing the projects will inform a dialogue on integration of NbS into existing public funding programs.

169. The project will promote the integration of nature-based solutions into existing national funding and planning mechanisms, such as the Interior Development Fund (FDI, its acronym in Spanish) and the Subnational Development and Management Program (PDGS, its acronym in Spanish). To ensure sustainability, during the structuring of the Full Proposal engagements will be carried out with the Office of Planning and Budget (OPP, its acronym in Spanish) to consider including nature-based-solution criteria in future subnational investment calls, and with the ANII to continue innovation calls linked to climate adaptation. In the same stage, work will be undertaken with the departmental governments in the Rio Negro Basin to explore co-financing for the maintenance of pilot nature-based solutions, seeking letters of intent or other supporting instruments as part of that process.

170. During the formulation phase, the project will define the operational agreements for the operation and maintenance (O&M) of Nature-based Solutions (NbS) with subnational governments, specifying responsibilities, service levels and the links to national-to-subnational transfer mechanisms. These elements will be detailed in the full proposal.

171. Similarly, institutional sustainability measures will be structured within the SNRCC framework, ensuring technical coordination and alignment with strategic instruments such as the NDCs and the National Adaptation Plans for the implementation and monitoring of NbS.

N. Provide an overview of the environmental and social impacts and risks identified as being relevant to the project / programme.

172. The project seeks an innovative financing mechanism to finance green and grey-green solutions to climate change vulnerabilities. As such, a screening/assessment process will be incorporated into the investment approval process. In that sense, further impact screening and/or assessment will be needed during the project implementation phase as the investments are requested under the funding mechanism. Risk screening will be part of the approval process. In addition, one of the lessons learned to be derived from the implementation of innovations is a re-assessment of the impacts and risks based-on the experience. The project expects positive impacts and will have a mechanism in place for establishing a baseline and assessing changes, effects, and impacts. This panorama will be re-assessed following the project development phase.

173. Preliminary environmental and social risks associated with the implementation of NBS in urban areas have been identified, in line with the Adaptation Fund's Environmental and Social Policy (ESP) and Gender Policy (GP) (see table below). These risks are considered manageable, and a mitigation plan proportionate to their level of impact will be developed. A detailed Environmental and Social Management Plan (ESMP) will be developed during the preparation of the full proposal. According to the preliminary analysis of environmental and social impacts and risks, the project is classified as risk B.

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
Compliance with the Law	The project will comply with national and local legislation, including environmental and labour regulations	

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Access and Equity		Medium risk of: Exclusion of vulnerable communities, women, youth, or older adults from consultations; Unequal appropriation of benefits Mitigation: Inclusive stakeholder-engagement plan with minimum gender and age quotas; accessibility measures in workshops; Territorial and social equity criteria in the methodology for assessing/selecting NbS
Marginalized and Vulnerable Groups		Medium risk of exclusion of vulnerable and marginalized groups from decision-making and benefits. Mitigation: Targeted outreach to vulnerable areas and groups; Inclusive engagement measures ensuring their effective participation in NbS identification and selection.
Human Rights	Activities are designed to support the realization of the right to a healthy environment and do not foresee any restriction of basic rights.	
Gender Equity and Women's Empowerment		Medium risk that women are under-represented. Mitigation: -Gender-responsive stakeholder-engagement plan; -Minimum participation targets for women.
Core Labour Rights	Works and services will comply with national labour law and ILO core labour standards; no child or forced labour is foreseen.	
Indigenous Peoples	No indigenous peoples as defined by the AF ESP have been identified in the proposed urban intervention areas.	
Involuntary Resettlement	No land acquisition or physical/economic displacement is envisaged; interventions will be located	

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	on public land or existing rights-of-way.	
Protection of Natural Habitats		Low risk of localized disturbance of urban green areas during implementation of rain gardens and bioretention systems. Mitigation: Environmental Management Plans (EMPs) for works; post-construction revegetation and restoration plans.
Conservation of Biological Diversity		Low risk of introducing non-native species through tree-planting programmes. Mitigation: Prohibition of species included in Uruguay's list of invasive exotic plant species; Technical supervision of planting plans.
Climate Change	The project focuses on adaptation; no significant GHG emissions are expected beyond those associated with minor works.	
Pollution Prevention and Resource Efficiency		Pollution related to works (e.g. dust, noise, solid and liquid waste, wastewater discharges, accidental spills, and inefficient use of water, energy and construction materials) during construction and maintenance of NbS and associated infrastructure. Mitigation: Environmental and Social Management Plans (ESMPs) will be required for all works contracts, including specific Waste Management, Pollution Prevention and Spill Response, and Resource Efficiency sub-plans.
Public Health	No direct public health risks have been identified; NbS are expected to generate co-benefits (urban cooling, improved air quality).	
Physical and Cultural Heritage	No physical or cultural heritage sites are expected to be affected; construction contracts will include	

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	procedures for treatment of heritage finds.	
Lands and Soil Conservation		Low risk of soil disturbance during excavation and installation of rain gardens and bioretention areas. Mitigation: Erosion-control measures during works; Environmental Management Plans; Revegetation/restoration plans after construction.

Table 9 Preliminary environmental and social impacts and risks

174. The project is committed to fully complying with the Adaptation Fund's Environmental and Social Policy and Gender Policy, including developing an Environmental and Social Management Plan (ESMP) and a Gender Action Plan during the full proposal stage.

175. For undefined sub-projects (USPs) within a fixed framework where NbS will be selected through a competitive mechanism, eligibility/ exclusion criteria will be established at the Funding Proposal and risk screening tools will be provided in the ESMP.

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PART III: IMPLEMENTATION ARRANGEMENTS

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A. Include a results framework for the project / programme proposal, including milestones, targets, and indicators.

Project/Programme Components	Expected Outcomes	Milestones	Target	Outcome indicators
Component 1. Increased- resilience to Climate Change Effects through Innovation in adaptive strategies	1.1. Enhanced urban resilience through deployment and testing of NbS pre-identified for Durazno and Rivera	1.1.1 Implementation of bioretention zones and rain gardens in Rivera.	At least 3 pilot NbS interventions designed, tested and evaluated	By the end of year 3, NbS for urban flood management and microclimate improvement implemented and operational in Rivera and Durazno. Output 1.1.1 — 3 bioretention systems implemented in Rivera. Output 1.1.2 — 3 bioretention systems implemented in Durazno. Output 1.1.3 —2 tree-planting interventions implemented in Rivera. Output 1.1.4 — 2 tree-planting interventions implemented in Durazno.
		1.1.2 Implementation of bioretention zones and rain gardens in Durazno.	At least 3 pilot NbS interventions designed, tested and evaluated	
		1.1.3 Implementation of tree planting and green areas in Rivera.	At least 2 NbS demonstration interventions implemented	
		1.1.4 Implementation of tree planting and green areas in Durazno.	At least 2 NbS demonstration interventions implemented	
	1.2. Enhanced urban resilience and capacities through the identification, deployment and testing of NbS funded through the competitive funding mechanism (Outcome 1.2.).	1.2.1 Deployment of NbS connected to mainstream investments at the urban level in 5 selected cities. (Linked to 3.1.1)	At least 5 NbS pilot interventions implemented	Number of NbS pilot interventions identified, designed, deployed and funded through the competitive mechanism in the five participating cities
		1.2.2 Deployment of NbS defined and designed at the subnational level including the participation and involvement of the private sector in the implementation and selected through a competitive mechanism (linked to 3.1.2)	At least 2 NbS pilot interventions designed and implemented with private sector participation.	Output 1.2.1 - NbS pilot interventions deployed in five selected cities through the competitive mechanism. Output 1.2.2 - NbS pilot interventions designed at the subnational level and implemented with private sector participation.
Component 2. Increased capacity to adopt and scale innovative NbS and	2.1. Enhanced public sector capacity to plan and execute NbS projects	2.1.1 A technical training and awareness program for city governments and planners supporting deployment of NbS and hybrid technologies, with	14 officials trained across the seven cities (2 per city)	Technical training and awareness program 2.1.1 - 14 officials trained across the seven cities (two per city),

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Project/Programme Components	Expected Outcomes	Milestones	Target	Outcome indicators
hybrid technology alternatives.		at least 30% participation from women and young people.		with at least 30% participation of women and young people
		2.1.2 A technical assistance program to support city governments in developing high-quality NbS project proposals for financing	5 NbS project proposals developed	Technical assistance for high-quality NbS proposals 2.1.2 - 5 NbS project proposals developed
		2.1.3 Expert-in-residence 1-to-2-year programs for sub national level governments to provide innovation, urban planning, adaptation, NBS, international financial and other expertise	At least one expert-in-residence program established	Expert-in-residence program 2.1.3 - At least one expert-in-residence program established
		2.1.4 Knowledge products and dissemination strategy to support scaling, adaptation, and regional replication of NbS innovations	5 knowledge products produced and disseminated	Knowledge products and dissemination strategy 2.1.4 – 5 knowledge products produced and disseminated (such as technical guidelines, operational manuals, training modules, analytical reports and synthesis documents)
	2.2 Enhanced private sector capacity to incorporate and implement NbS alternatives	2.2.1 A urban NbS training and awareness program for SMEs at the subnational/local level.	10 SMEs demonstrating improved technical capacities to offer NbS-related services.	Private sector actors have strengthened capacities to incorporate, and implement NbS-alternatives by Year 3. 2.2.1: Number of SMEs demonstrating improved technical and business capacities to incorporate and implement NbS solutions.
		2.2.2 Small and medium sized businesses participate exchanges with private sector actors from other countries involved in implementing NbS (innovation days week)	At least one international NbS exchange event implemented with participation of SMEs from the five cities.	2.2.2 SMEs participating in international NbS exchanges and demonstrating increased knowledge of NbS practices
Component 3. An enabling environment for increased	3.1. An institutional and Financial Framework to apply and scale NbS at the city level,	3.1.1 An innovative financing mechanism established to support the integration of NbS on public transfers from national to subnational government for infrastructure.	At least 5 NbS investments proposed for integration into	3.1.1 - The number of NbS investments incorporated or proposed for incorporation into

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Project/Programme Components	Expected Outcomes	Milestones	Target	Outcome indicators
investment in urban resilience to climate change effects			national-to-subnational public transfers.	government funding streams for urban infrastructure.
	3.2. Private sector involved in incorporating climate adaptation technologies and services in their operations and infrastructure as well as incorporating NbS as a business line	3.2.1 A competitive financial mechanism operational, increases subnational capacities to identify, design and implement NbS at the Urban level.	At least 2 NbS pilot interventions funded in two of the five cities..	3.2.1 - Number of cities accessing NbS or hybrid-technology funding through the operational competitive mechanism by Year 1
		3.2.2 A Private Sector Engagement Plan executed to mobilize additional and matching financial resources and foster business engagement in climate adaptation alternatives	At least five private sector entities engaged.	3.2.2 - Number of private sector entities actively engaged in NbS-related initiatives, financial contributions or climate adaptation services, with at least 5 entities enganed by Year 3.,
		3.2.3 Establishment of a platform for dialogue between the government, private sector, and financial institutions to co-design adaptation investment strategies (e.g., under the umbrella of the investment law)	One platform established and operational	3.2.3 - Platform for public–private–finance dialogue established and functioning to inform NbS and adaptation investment strategies.

Table 10 Project Results Framework

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B. Demonstrate how the project / programme aligns with the Results Framework of the Adaptation Fund

Project Objective(s)[11]	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Expected Results	Grant Amount (USD)
Catalyse adaptation actions based on Nature-based Solutions (NbS) that reduce climate risks associated with floods and extreme temperatures in vulnerable cities of the Rio Negro Basin, through an innovative economic-financial mechanism.	Mts^2. of urban resilience infrastructure implemented through NbS.	Outcome 4: Increased adaptive capacity within relevant development sector services and infrastructure assets	4.2. Physical infrastructure improved to withstand climate change and variability-induced stress	Enhanced urban resilience through deployment and testing of NbS in 7 cities.	4,205,100
	Number of national development instruments (plans, programs, guidelines, fiscal incentives, or financial mechanisms) that incorporate integration of NbS and hybrid technologies into climate-adaptation recommendations co-designed through the multi-stakeholder platform.	Outcome 7: Improved policies and regulations that promote and enforce resilience measures	7. Climate change priorities are integrated into national development strategy	OPP and ANII integrate NbS and hybrid technologies in their financial mechanisms.	

[11] The AF utilized OECD/DAC terminology for its results framework. Project proponents may use different terminology but the overall principle should still apply

	Number of vulnerable cities in the Rio Negro Basin with successfully demonstrate effects of Nature-based or hybrid adaptation innovations that reduce the effects of floods, drought, and extreme temperatures.	Outcome 8: Support the development and diffusion of innovative adaptation practices, tools and technologies	8.1 No. of new, adapted or improved adaptation solutions developed contextually and with the inclusion of the communities most vulnerable to climate change	No. of innovative practices/tools and/or technologies	
			8.3 No. of individuals or organizations (disaggregated by gender) that submit an application to an innovation competition or challenge	No. of applicants to innovation calls under the project or programme	
Project Outcome(s)	**Project Outcome Indicator(s)**	**Fund Output**	**Fund Output Indicator**	**Expected Results**	**Grant Amount (USD)**
1.1: Enhanced urban resilience through deployment and testing of NbS pre-identified for Durazno and Rivera	1.1 Mts^2 of urban resilience infrastructure implemented through NbS, including bioretention zones, water gardens, and tree planting, in Rivera and Durazno.	Output 8: Viable innovations rolled out, scaled up, encouraged and/or accelerated at regional, national, and/or subnational level	8.2.1 No. of key findings generated from an innovation practice, tool, and/or technology	No. and type of key findings Type [Practice, product, technology]	1,000,000
		Output 4: Vulnerable development sector services and infrastructure assets strengthened in response to climate change impacts, including variability	4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by sector and scale)		

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1.2. Enhanced urban resilience and capacities through the identification, deployment and testing of NbS funded through the competitive funding mechanism (Outcome 1.2.)	1.2 Number of NbS projects identified, deployed, and funded through mainstream financing	Output 8: Viable innovations rolled out, scaled up, encouraged and/or accelerated at regional, national, and/or subnational level	8.2.2 No. of learning and sharing initiatives undertaken, including communication initiatives	No. and type [e.g., studies and reports, lessons-learned events and workshops, articles, broadcasts, social media, "change, learning and new information" initiatives that support iterative deployment of the innovation]	2,150,000
		Output 4: Vulnerable development sector services and infrastructure assets strengthened in response to climate change impacts, including variability	4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by sector and scale)		
2.1. Enhanced public sector capacity to plan and execute NbS projects.	2.1.a) Number of officials trained per city, segregated by gender. 2.1.b) Number of projects developed by cities. 2.1.c) Number of knowledge products disseminated.	Output 8: Viable innovations rolled out, scaled up, encouraged and/or accelerated at regional, national, and/or subnational level	8.2.2 No. of learning and sharing initiatives undertaken, including communication initiatives	No. and type [e.g., studies and reports, lessons-learned events and workshops, articles, broadcasts, social media, "change, learning and new information" initiatives that support iterative deployment of the innovation]	715,100
2.2 Enhanced private sector capacity to incorporate and implement NbS alternatives	2.2. Number of small and medium-sized businesses demonstrating improved technical and business capacities to offer NbS solutions, with a target of NbS implementation by the end of Year 3.	Output 8: Viable innovations rolled out, scaled up, encouraged and/or accelerated at regional, national, and/or subnational level	8.3.1 No. of applications (individuals or organizations) to innovation calls under the project or programme.	No. and type of applicant/s [individual/s or organization/s]	100,000
3.1. An institutional and Financial Framework to apply and scale NbS at the city level	3.1. Number of NbS projects integrated into government funding streams for infrastructure projects.	Output 8: Viable innovations rolled out, scaled up, encouraged and/or accelerated at regional, national, and/or subnational level	8.1.1 No. of innovators supported (disaggregated by gender (male/female/other) and youth status (youth/non-youth)).	No. of persons disaggregated by gender (male/female/other) and youth status (youth/non-youth)	70,000

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		Output 7: Improved integration of climate-resilience strategies into country development plans	7.2. No. of targeted development strategies with incorporated climate change priorities enforced		
3.2. Private sector involved in climate adaptation technologies and services in their operations and infrastructure as well as incorporating NbS as a business line	3.2 a) Number of cities that access funding for NbS and hybrid technologies through an operational and competitive funding mechanism.	Output 8: Viable innovations rolled out, scaled up, encouraged and/or accelerated at regional, national, and/or subnational level	8.1.1 No. of innovators supported (disaggregated by gender (male/female/other) and youth status (youth/non-youth)).	No. of persons disaggregated by gender (male/female/other) and youth status (youth/non-youth)	
	3.2 b) Number of private sector entities actively engaged in climate adaptation technologies and services, as evidenced by participation in NbS-related initiatives, financial contributions, and technical deployments.	Output 8: Viable innovations rolled out, scaled up, encouraged and/or accelerated at regional, national, and/or subnational level	8.1.2 No. of innovation related partnerships leveraged for exchange of goods or services or ideas, consultations, and assistance between grantee and stakeholder/s	No. and type of partnerships [e.g., technical assistance, funds, in-kind contributions, or others]	170,000
*The amounts related to the project outcomes does not include Project execution costs (PMC + M&E), Project Preparation Costs and Project/Programme Cycle Management Fee charged by the Implementing Entity (8%), which totalize: $ 794,900. The Project Formulation Grant (PFG) of USD 150,000 is not included in this total and is requested separately.					

Table 11 Project Alignment with Results Framework of the Adaptation Fund

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PART IV: ENDORSEMENT BY GOVERNMENTS AND CERTIFICATION BY THE IMPLEMENTING ENTITY

A. Record of endorsement on behalf of the government[12] *Provide the name and position of the government official and indicate date of endorsement for each country participating in the proposed project / programme. Add more lines as necessary. The endorsement letters should be attached as an annex to the project/programme proposal. Please attach the endorsement letters with this template; add as many participating governments if a regional project/programme:*

María Fernanda Souza, National Director of Climate change, Ministry of Environment	Date: 09-03-2025

[12] 6. Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programmes proposed by the implementing entities.

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B. Implementing Entity certification *Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address*

<table>
<tr><td colspan="2">I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.</td></tr>
<tr><td colspan="2">Implementing Entity Coordinator:

_____
Ec. Rafael Laureiro, CND General Manager</td></tr>
<tr><td>Date: 10/06/2025</td><td>Tel. and email:
+598 2916 2800; cnd@cnd.org.uy</td></tr>
<tr><td colspan="2">Project Contact Person:
Ec. Luciana López, Environmental Programs Coordinator
Tel. And Email: +598 2916 2800 int. 285; llopez@cnd.org.uy</td></tr>
</table>

Ministerio de Ambiente

Letter of Endorsement by Government

Government of Uruguay, Ministry of Environment

September 3rd, 2025

To: The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat
Email: afbsec@adaptation-fund.org
Fax: 202 522 3240/5

Subject: Endorsement Concept Note for the Project "Strengthening Urban Resilience in the Río Negro Basin through Nature-Based Solutions for Climate Adaptation".

Dear Members of the Adaptation Fund Board,

In my capacity as the Designated Authority for the Adaptation Fund in Uruguay, I confirm that the above national Concept Note proposal is in accordance with the government's national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in Uruguay.

Accordingly, I am pleased to endorse the above Concept Note proposal and with support from the Adaptation Fund. If the concept note is approved, the full project proposal will be submitted by Corporación Nacional para el Desarrollo (CND) as the implementing entity.

Sincerely,

María Fernanda Souza
National Director of Climate Change
Ministry of Environment

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